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Social response to population change and migration: the impact of population change on individuals and institutions

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SOCIAL RESPONSE TO POPULATION CHANGE and MIGRATION

THE IMPACT OF POPULATION CHANGE ON INDIVIDUALS AND INSTITUTIONS

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Agricultural Experiment Stations of
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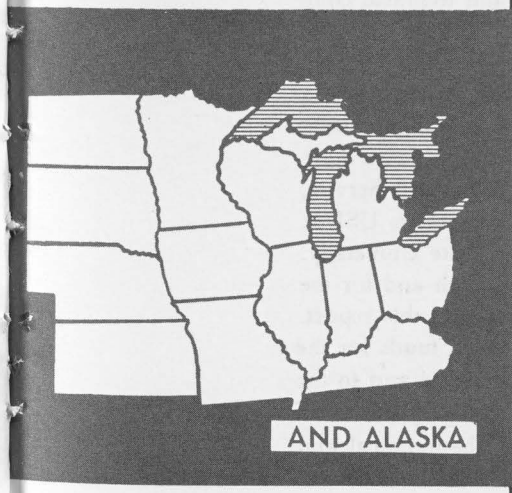

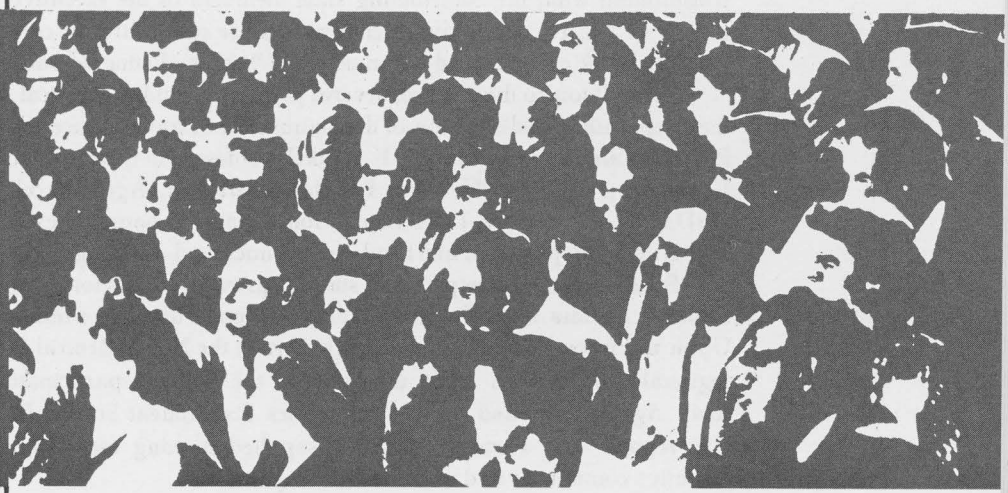

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AGRICULTURAL AND HOME ECONOMICS EXPERIMENT STATION
IOWA STATE UNIVERSITY of Science and Technology
AMES, IOWA

NORTH CENTRAL REGIONAL SUBCOMMITTEE FOR NC-18
IMPACT OF POPULATION CHANGE ON THE COMMUNITIES OF THE NORTH CENTRAL REGION

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—Ronald G. Klietsch
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* Indicates cooperating states supplying data for this project.

FOREWORD

This report represents the cooperative effort of six state experiment stations and is based on data from seven midwestern counties. The seven counties represent three different area types, each having similiar, as well as different, demographic characteristics: (a) out-migration, low farm-operator levels of living and low industrialization; (b) out-migration, high farm-operator levels of living and low industrialization; and (c) in-migration, high farm-operator levels of living and high industrialization.

Examined in the report are (1) the historical and current antecedents of migration, (2) selected social characteristics of the populations in the areas, (3) the impact of migration and population change on social and institutional systems and (4) the decision-making processes and migration procedures of individuals. Within this framework, it becomes apparent that population shifts are the result of individual response to social environment. Although migration is an individual act, the cumulative effects of many individuals migrating create community conditions that require community action. Thus, the community problems created for school systems, governmental units, religious institutions, etc., are examined for the three different types of counties.

The changes and problems created by migration are not unique to the counties studied. They represent instances of similar changes and problems that are widespread in the United States. The information and data in this report, therefore, will be of use to representatives of educational systems, agricultural groups, political units, industry and religious organizations in responding to population shifts occuring in their own regions.

—L. M. TURK
Administrative Advisor to
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CONTENTS

Social Response to Population Change and Migration

The Impact of Population Change on Individuals and Institutions

Population change over the last 40 years has greatly redistributed Midwest populations. Migration has long been a social response to change—both to changing capacities in the agricultural system and to socio-cultural attractions and opportunities in the urban-industrial areas. Some of the surplus agricultural population has moved to cities and suburbs. The result is a "selective dismembering" of many communities and an inordinate growth of others.

As population change continues, and as associations and institutions are weakened by population loss, the social cost of population movement is reflected in economic activity, educational systems, government efforts and in the very values and purposes of social existence that motivate human behavior.

People live in communities, and community institutions are the main stream of social action. Thus, the conditions of community institutions reflect the strengths and weaknesses of community life—in this sense, institutions mirror their effectiveness. Accordingly, the conditions of community life form a background for human existence. When persons make decisions to migrate or not to migrate, they tend to use their own community, and its strengths and weaknesses, as a standard of comparison in judging other communities.

In an effort to meet and cope with the effects of population change, many communities have examined their resources and potentials. The all-too-frequent outcome of this self-examination is the view that the community simply cannot meet the growing demands of its residents; thus, more and more persons look beyond their communities. Many communities cannot provide the diverse range of socio-economic and educational opportunities sought by their youth. Thus, the youth form the bulk of Midwest migrants.

But it is not the mere loss or addition of numbers of residents that makes population change important. The sociological significance of population change, aside from the sheer numerical aspects, lies in the impact and social consequences that population change has upon (1) the stability of community life and the individual and (2) the adequacy of social institutions to cope with the changing social needs and altered characteristics of the resident population. In short, the significance of population change lies in how it affects community life and the lives of the residents of the community.

BACKGROUND OF THE STUDY

Explanations of the motives of the individual's migration, the adjustments to migration and the consequences of population change for individuals and social systems are the central problems of this research. The specific research problems undertaken may be best understood by first considering the assumptions that underlie the research.

This research rests upon the idea that population movement can produce various common and unique effects and also prompt different individual reactions and institutional adjustments under varying social, economic and ecological conditions, or under conditions generally found in predetermined type areas of the North Central Region. Further, it is assumed that population change brings about certain forms of social change and that, conversely, social change in community and institutional life may bring about certain population trends.

EXPLANATION OF TYPE AREAS AND RESEARCH SETTINGS

Certain procedural problems arise in a regional analysis of the impact of population change when counties are used as units of observation; this is because time-cost factors prohibit the usual sampling procedure in selecting study areas. Therefore, a procedure for selecting study counties that represent certain "ideal types" was devised, assuming that population change in a given area is directly related to two variables: *the extent of industrial development* and *agricultural economic contribution.* The percentage of persons employed in industry is viewed as a measure of industrial development. Farm-operator level of living is viewed as a measure of the agricultural economy. These measures were used as independent variables to account for population increase or decrease. These variables, together with the percentage and direction of net migration (1940-60), were used in classifying the 1,175 counties in the region, including Kentucky (fig. 1).

The inspection of each county's traits on each independent variable permitted high or low categorization with respect to a regional average. Thus, all counties of the region were classed as having net in-migration or out-migration, a high or low level of farm operator income and high or low industrial employment. When these three variables are schematically arranged, the potential array and actual survey county types appear as shown in table 1.

Although certain combinations of these variables have few identifiable empirical counterparts, (e.g., high in-migration, low farm-operator level of living and low industrial development), it is conceivable that they might occur more frequently, given certain other conditions. However, the combinations of variables used in this research have the greatest frequency and reflect the widespread existence in the Midwest of conditions represented by these com-

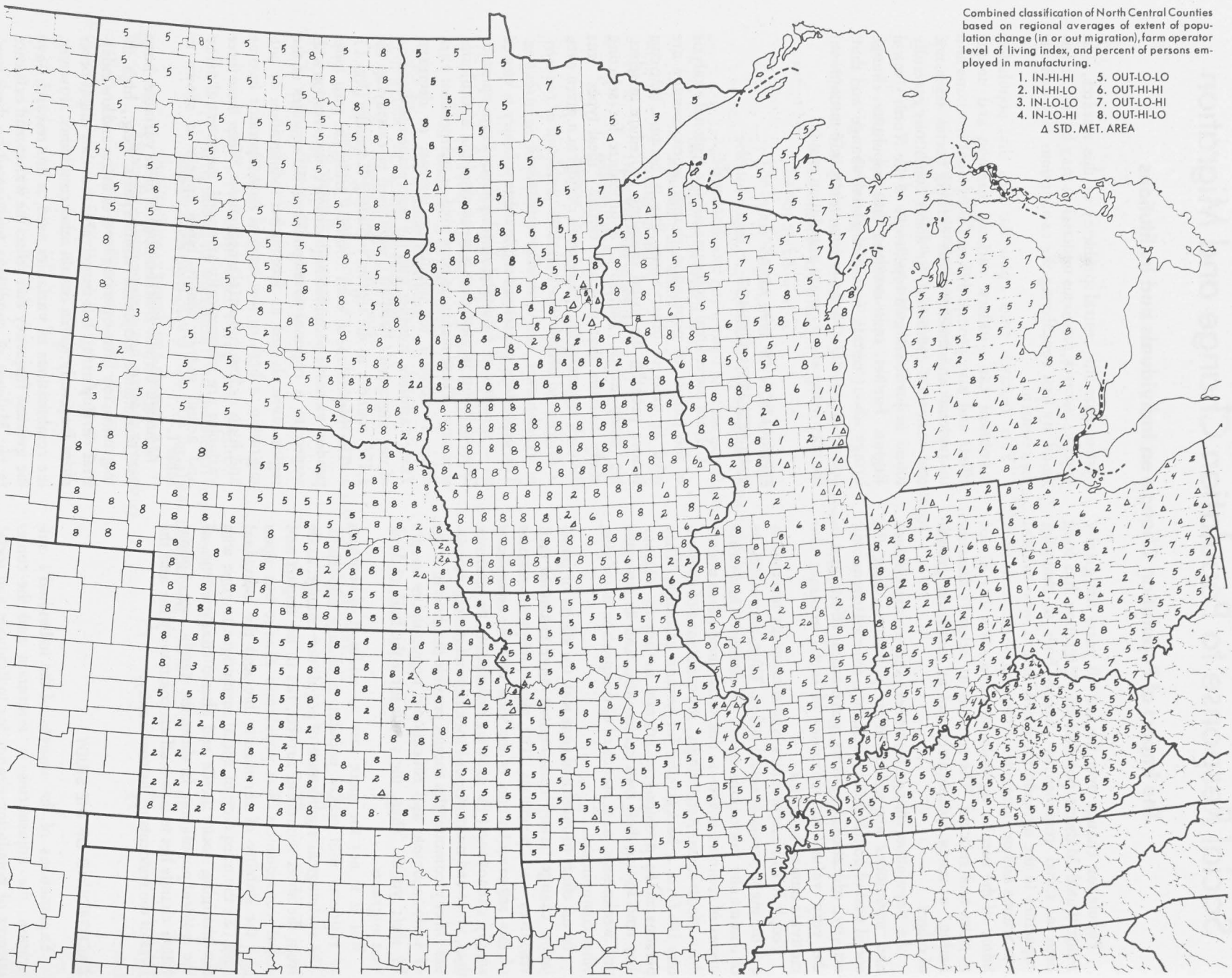
Combined classification of North Central Counties based on regional averages of extent of population change (in or out migration), farm operator level of living index, and percent of persons employed in manufacturing.
1. IN-HI-HI
2. IN-HI-LO
3. IN-LO-LO
4. IN-LO-HI
5. OUT-LO-LO
6. OUT-HI-HI
7. OUT-LO-HI
8. OUT-HI-LO
Δ STD. MET. AREA

FIGURE 1

Table 1. Profile of type areas and actual survey types selected.[a]

Migration	Farm-operator level of living	Industrialization
Out*	High*	High Low*
	Low*	High Low*
In*	High*	High* Low
	Low	High Low

[a] The three types indicated by asterisks were selected for study because of their particular relevance for an understanding of the impacts of rural-urban population movement and because of the relative frequency of these type areas in the region. Although the counties used in this study were assigned fictional names to represent area types, the actual identification is as follows:

Type area	Fictional area type name	Actual county name and state
out-high-low	Farm County	Greene County, Iowa
out-low-low	Copper County	Ontonogan County, Michigan
out-low-low	Forest County	Aitkin County, Minnesota
in-high-high	Suburban County	Franklin County, Ohio
out-low-low	Plains County	Marshall County, South Dakota
out-low-low	Lake County	Price County, Wisconsin
in-high-high	Interurban County	Kenosha County, Wisconsin

binations. Hence, certain of these combinations are of greater present relevance than other possible combinations. The combinations are:

(a) High net *out*-migration, *low* farm-operator level of living and *low* industrial development (out-low-low type), which includes four survey counties situated in Michigan, Minnesota, South Dakota and Wisconsin. To preserve the "ideal type" notion of the actual counties surveyed, the four out-low-low counties are designated as Copper County, Michigan, Forest County, Minnesota, Plains County, South Dakota, and Lake County, Wisconsin (see table 2).

(b) High net rural *out*-migration, *high* farm-operator level of living and *low* industrial development (out-high-low), which includes one survey county situated in Iowa, designated as Farm County, Iowa.

(c) High net *in*-migration, *high* farm-operator level of living and *high* industrial development (in-high-high), which includes two counties situated in Wisconsin and Ohio, designated as Interurban County, Wisconsin, and Suburban County, Ohio.

Table 2. The profiles of survey counties based on the criterion variables.

	Total net migration	Percent employed in industry		Farm-operator level of living	
	1950-60[a]	1950	1960	1950	1954
	(percent)				
Out-low-low counties:					
Copper County, Michigan	− 8.4	26	15	100	108
Forest County, Minnesota	− 3.2	7	12	151	163
Lake County, Wisconsin	−21.1	20	21	108	132
Plains County, South Dakota	−29.2	1	2	134	154
Out-high-low county:					
Farm County, Iowa	−17.8	3	8	182	193
In-high-high counties:					
Interurban County, Wisconsin	+15.1	54	50	162	173
Suburban County, Ohio	+15.0	25	26	166	185

[a] U. S. Bureau of the Census. Current population reports, Series P-23, No. 7. Components of population change, 1950-60, for counties, standard metropolitan statistical areas, state economic areas and economic subregions.

STABILITY OF TYPE AREA CLASSIFICATION

Approximately one-fifth of the 1,175 counties in the North Central Region were in-migration areas during the last 2 decades, although the number of counties gaining population through net in-migration declined between the 1940-50 and 1950-60 periods. About three-fourths of the counties had stable out-migration patterns during the 2 decades.

Counties characterized by in-migration tend to have a high farm-operator level of living index. Counties characterized by out-migration tend to have a low percentage of persons employed in manufacturing. These two relations were closely maintained for both decades in terms of state and regional averages. The most stable type area patterns between the decades were the "out-low-low" and "out-high-low." While differing only in terms of the low versus high farm-operator level of living indexes, the "out-low-low" and the "out-high-low" patterns account for 37 and 36 percent, respectively, of all patterns between 1950 and 1960. The single remaining pattern of any sizable stability was the "in-high-high," accounting for roughly 8 percent between 1950 and 1960. The remaining regional patterns were infrequent, mixed or very unstable between 1950 and 1960. Tables 3 and 4 present summaries of county migration patterns by state for the region for 1950 and 1960.

Figure 2 reveals graphically the areas of the region characterized by out-migration: the areas of northern Michigan, Wisconsin, Minnesota, South Dakota, North Dakota, Iowa, Nebraska and Kansas, also the southern parts of the region adjacent to the Ohio River—Kentucky, southern Missouri and Illinois. Virtually all in-migration areas contain large metropolitan industrial centers.

RESEARCH PROBLEM AREAS

The following questions guided research in this study. Each question is posed as a central part of a larger problem, while all questions relate to the general problem of how individuals and social institutions adjust to population change under varying conditions. Subsequent information is then organized so that each question is answered for the type area under consideration.

1. What are the antecedents of population change in each of the three type areas? How does the past relate to the present? What is the social setting and past history

FIGURE 1

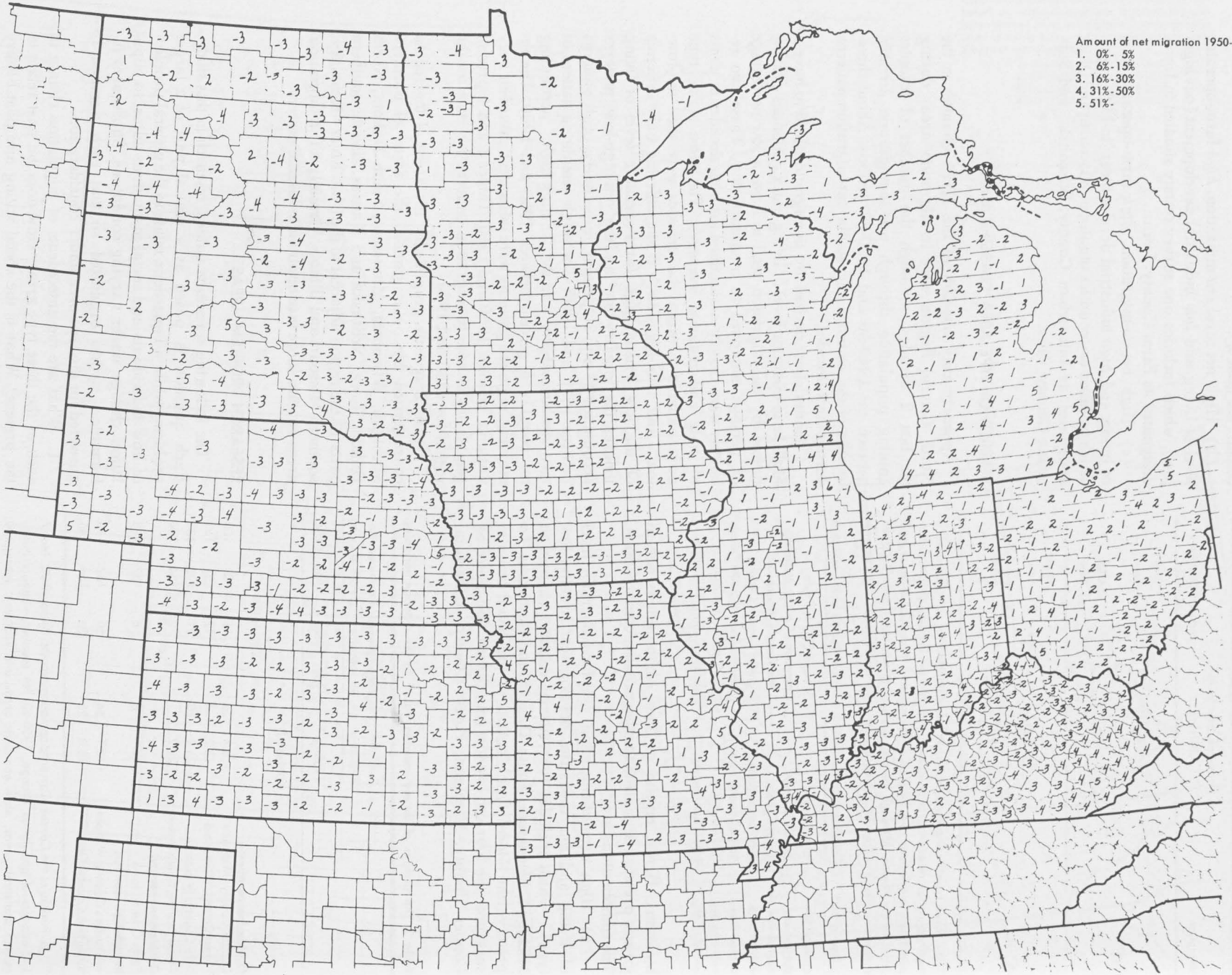

FIGURE 2

Table 3. County migration patterns[a] in the North Central Region (including Kentucky), based on regional averages, 1950.

State	All patterns		Migration patterns: In-high-high		In-high-low		In-low-low		In-low-high		Out-low-low		Out-high-high		Out-low-high		Out-high-low	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All 13 states	1,175	100.0	101	8.6	93	7.9	30	2.6	13	1.1	438	37.3	38	3.2	24	2.0	438	37.3
Illinois	102	100.1	17	16.7	11	10.8	1	1.0	0	–	28	27.5	1	1.0	0	–	44	43.1
Indiana	92	100.0	22	23.9	14	15.2	7	7.6	3	3.3	14	15.2	8	8.7	3	3.3	21	22.8
Iowa	99	100.0	3	3.0	6	6.1	0	–	0	–	2	2.0	5	5.1	0	–	83	83.8
Kansas	105	100.2	1	1.0	22	21.0	1	1.0	0	–	24	22.9	0	–	0	–	57	54.3
Kentucky	120	99.9	1	0.8	2	1.7	6	5.0	0	–	106	88.3	1	0.8	1	0.8	3	2.5
Michigan	83	99.9	20	24.1	5	6.0	8	9.6	5	6.0	32	38.6	2	2.4	6	7.2	5	6.0
Minnesota	87	99.8	3	3.4	5	5.7	1	1.1	0	–	25	28.7	1	1.1	2	2.3	50	57.5
Missouri	115	100.0	0	–	3	2.6	4	3.5	3	2.6	78	67.8	1	0.9	4	3.5	22	19.1
Nebraska	93	100.0	0	–	8	8.6	0	–	0	–	19	20.4	0	–	0	–	66	71.0
North Dakota	53	100.0	0	–	0	–	0	–	0	–	39	73.6	0	–	0	–	14	26.4
Ohio	88	100.0	25	28.4	9	10.2	0	–	2	2.3	18	20.5	12	13.6	5	5.7	17	19.3
South Dakota	67	100.1	0	–	5	7.5	2	3.0	0	–	30	44.8	0	–	0	–	30	44.8
Wisconsin	71	100.0	9	12.7	3	4.2	0	–	0	–	23	32.4	7	9.9	3	4.2	26	36.6

[a] The county patterns, or types, are derived from a combination of three measures: (1) in or out net migration between **1940** and **1950**, (2) high or low farm-operator level of living in relation to the regional average for **1950** and (3) high or low proportion of employed workers engaged in manufacturing in relation to the regional average for **1950**.

Source: Further information on the stability of these type areas is found in: Beegle, J. A., D. Marshall and R. Rice. Selected factors related to county migration patterns in the north central states, 1940-50 -1950-60. Michigan State Agricultural Experiment Station (in press).

Table 4. County migration patterns[a] in the North Central region (including Kentucky), based on regional averages, 1960.

State	All patterns		Migration patterns: In-high-high		In-high-low		In-low-low		In-low-high		Out-low-low		Out-high-high		Out-low-high		Out-high-low	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All 13 states	1,175	100.0	99	8.4	55	4.7	34	2.9	21	1.8	422	35.9	70	6.0	44	3.7	430	36.6
Illinois	102	100.0	15	14.7	6	5.9	1	1.0	0	–	24	23.5	10	9.8	0	–	46	45.1
Indiana	92	100.0	17	18.5	5	5.4	0	–	4	4.3	14	15.2	19	20.7	11	12.0	22	23.9
Iowa	99	100.0	3	3.0	3	3.0	0	–	0	–	11	11.1	6	6.1	0	–	76	76.8
Kansas	105	100.1	1	1.0	9	8.6	1	1.0	0	–	27	25.7	0	–	0	–	67	63.8
Kentucky	120	99.9	1	0.8	2	1.7	6	5.0	3	2.5	103	85.8	1	0.8	4	3.3	0	–
Michigan	83	99.8	19	22.9	3	3.6	6	7.2	6	7.2	31	37.3	8	9.6	8	9.6	2	2.4
Minnesota	87	99.8	2	2.3	6	6.9	3	3.4	1	1.1	33	37.9	1	1.1	2	2.3	39	44.8
Missouri	115	99.9	2	1.7	1	0.9	12	10.4	3	2.6	79	68.7	2	1.7	4	3.5	12	10.4
Nebraska	93	100.0	0	–	5	5.4	0	–	0	–	11	11.8	0	–	0	–	77	82.8
North Dakota	53	100.1	0	–	2	3.8	2	3.8	0	–	18	34.0	0	–	0	–	31	58.5
Ohio	88	100.0	30	34.1	7	8.0	2	2.3	4	4.5	14	15.9	16	18.2	11	12.5	4	4.5
South Dakota	67	100.0	0	–	3	4.5	1	1.5	0	–	23	34.3	0	–	0	–	40	59.7
Wisconsin	71	100.0	9	12.7	3	4.2	0	–	0	–	34	47.9	7	9.9	4	5.6	14	19.7

[a] The county patterns, or types, are derived from a combination of three measures: (1) in or out net migration between **1950** and **1960**, (2) high or low farm-operator level of living in relation to the regional average for **1960** and (3) high or low proportion of employed workers engaged in manufacturing in relation to the regional average for **1960**.

of the county under examination, and how do these factors assist in understanding ongoing population change?

2. What are the characteristics of the population in each of the three type areas? How have the population characteristics changed as a result of population change? What are the implications of changing population characteristics in affecting: (a) the adjustment of residual or migrating individuals and local social institutions and (b) the ideas and attitudes that individuals have of their community?

FIGURE 2

3. How do the various effects of population change upon social institutions compare within the three type areas? What social changes in institutions are not directly due to population change but masked as population change? Which institutions are and are not critically affected by population change within the three type areas? What are the roles of agricultural marginality or richness and industrial development in affecting institutional adjustment?

4. How is population change and migration to be viewed and explained? What general theoretical frame of reference can be used to account for the various phenomena encountered with population and social change? How can the antecedents and consequences of population change be linked to ongoing social change, along with individual and institutional adjustment?

Since this research emphasizes comparative analysis of adjustments of individuals and social institutions, three levels of analysis were required:

1. Comparative analysis of the background and social histories of the three type areas as related to population change.

2. Comparative analysis of the social characteristics and adjustment of individuals within the three type areas.

3. Comparative analysis of institutional adjustments in each of the three type areas.

GENERAL GUIDELINES

This research is guided by three major hypotheses, the implications of which may be best understood by briefly examining the variables used. Under certain conditions, the effects of population change can be beneficial to an area. The reduction of a surplus population depresses certain demands made upon institutional services. Similarly, a growing concentration of people in an industrial area may serve to meet manpower needs of the metropolis. In this instance, however, population change may induce mixed or even increase demands upon institutions. On the other hand, population change may produce certain detrimental effects. These, overtime, may affect the vitality of institutions and reduce the vigor of the community to withstand further impact of population change.

The different capacities of midwestern communities to withstand or benefit from population change can be analyzed in terms of the variables used in this research; namely, the agricultural contribution, as measured by farm-operator level of living, and the extent of industrial development, as measured by percent employed in industry.

The extent of industrialization may be considered a proximate index of the capacity of a county or community to hold and to continue to absorb a mobile population. Since the general direction of population movement is toward the large industrial-metropolitan complex, these centers rely, in part, upon the continued influx of surplus population from other areas.

At the same time, a point is rapidly being reached in today's socio-economic systems beyond which industrial capacity has limits on manpower needs and its ability to absorb surplus populations which will not or cannot migrate. Automation has accentuated and has narrowed this demand within recent years, particularly in terms of the mobile, semiskilled segment of the labor force. Hence, in one sense, extensive industrialization acts as a highly selective magnet, increasingly drawing a more restricted segment of the labor force. But, at the same time, industrialization—when perceived broadly as opportunity and through correlates, such as cultural advantages, cosmopolitanism and urban living—attracts all segments of surplus populations.

In contrast to expanding industrial centers, areas that are industrially underdeveloped have different problems—problems that involve the management and channeling of social consequences of population loss or movement. Low industrial development is a proximate measure of the *inability* of an area to hold its residents, without other compensating factors. Hence, social institutions and communities in areas of high out-migration, having low industrial development but few compensatory factors, are faced with problems of a different and more prolonged nature than institutions and communities in areas undergoing rapid population build-up under the stimulus of industrial growth.

Moreover, despite its continual reduction in socio-economic position, agriculture still plays an important role in population change—a role varying from that of counterbalancing the lack of industrial development to that of accentuating the absence of industrial strength. Since large areas of the Midwest still depend almost exclusively on an agricultural economy, along with its variable capacity to absorb surplus local manpower, the role of agriculture cannot be overlooked.

Where agriculture makes a significant contribution to an area's economy and has a dominant position over industry, a particular "cushioning" of the effects of population change is noted. This cushioning effect seemingly permits sustained population loss without drastic institutional impact, as long as the agricultural system remains relatively strong. In this sense, agriculture penetrates a community's life so thoroughly that it is, in some respects, able to absorb the impact of population change or to postpone the certain consequences.

On the other hand, where the agricultural system of an area is weak or marginal and where inordinate dependence is placed upon agriculture in the absence of compensatory industrial strength, the impact of population change is greater. Lacking the cushioning effect of industry or of a strong agricultural system, population change in such an area rapidly demoralizes and weakens institutional supports. Changes in the population, whether in characteristics or numbers, tend to magnify the impact of resulting social change. Moreover, such areas tend to develop chronic social problems, low morale and little sense of future growth.

Last, population change is only one of many processes affecting Midwest community life. What appears as an effect of population change may, on closer inspection, be some other phenomenon. Similarly, effects imputed to processes, such as centralization, social reorganization or disorganization, may be related to population change

in a more direct sense than previously understood. Thus, the unraveling of various processes and trends affecting community life reveals a variety of unsuspected events involving population change only at certain points.

The foregoing may be summarized in the following hypotheses:

1. The extent of population change (e.g., gain or loss of consumers, of school-age populations, of parishioners, of a tax base, etc.) upon community social institutions and individual adjustment is related to and modified by the extent of industrialization and of agricultural economic contribution. Industrial development and agricultural richness, singly and in combination, are associated with population change, and, in turn, these same variables accentuate or moderate the impact of population change.

2. The adjustments noted in the type areas over time are functionally related to changes in the characteristics of residual and incoming populations. Thus, for example, if inordinate numbers of the two highly dependent age groups make up the bulk of the residual population, the adjustment of individuals and institutions will differ from those areas where incoming populations are from the younger, more productive segments of the population.

3. Population change is only one factor affecting social change and adjustment and, then, only certain kinds of social change. Population change, along with its visibility and the intensity of its effects, is integrally related to other ongoing social forces. In certain instances, economic, political and general cultural trends may mask the effects of population change. Population change may pose as an underlying cause for these phenomena, even as it may appear as an outcome of certain other trends. Consequently, the visibility and recognition of the effects of population change may be blurred or obscured by larger, more penetrating national trends. Thus, it can be hypothesized that population change may only indirectly prompt certain types of social change, and, thus, that population change is not always the manifest cause.

Additional hypotheses are presented as outgrowths of these, and broader implications and evidence supporting the hypotheses are detailed later. Since considerable abridgement and synthesis were necessary, certain criteria were developed for the inclusion of research findings. First, the data included must illustrate the impact of and social response to population change. Second, in the absence of clear-cut evidence of population change and its role in affecting social change, the process that appears to underlie the change is noted, along with its possible relation to population change.

HISTORICAL ANTECEDENTS OF MIGRATION IN THE THREE TYPE AREAS

The impact of population change can be better understood by considering the historical antecedents of population change and by examining the social characteristics of residual and in-migrating populations—how these are altered by population shifts, and, in turn, how changing population characteristics induce social change. Historical profiles of the survey areas are given in this section, followed in the next section by information concerning the direction and forms of ongoing social change resulting from population change.

Because of abridgement of data, the out-low-low counties (Forest County, Minnesota, Copper County, Michigan, Lake County, Wisconsin, and Plains County, South Dakota) are considered jointly as examples of a subregion. Farm County, Iowa, is considered as a single example of the out-high-low area, and Interurban County, Wisconsin, and Suburban County, Ohio, are examples of the in-high-high area.

THE OUT-LOW-LOW AREAS

Copper County, Michigan, Forest County, Minnesota, Lake County, Wisconsin (northern forested counties). The area surrounding Lake Superior and extending northward to the Canadian border outlines the northern forested area, to which the term "cut-over" was formerly applied. Communities in the northern forested area first developed around logging, mining and shipping points as needs for transportation and supply centers arose. Manpower recruitment was of little concern since the logging and mining "boom" attracted great numbers of persons unable to find employment in farming or other industries but who accepted the rigors and uncertain employment opportunities offered by these industries. Secondary communities and trade centers arose to meet demands for food supplies, repairs and lesser services in maintaining the lumber, mining, shipping and rail industries.

Before 1870, the northern areas of Minnesota, Wisconsin and upper Michigan were heavily forested. Timber and an untapped reserve of iron ore, copper and lesser mineral deposits constituted the two major resources. Land-eager settlers from northern Europe, together with the ubiquitous Yankee, formed the first wave of in-migration and settlement. These persons, unable to secure land in better-suited southern farming areas, flocked to the remaining marginal farm land in the northern states. As immigration continued, leading frequently to the development of insular ethnic settlements, marginal frontier farming formed a basic subsistence pattern.

However, with the advent of full-scale mining in the Mesabi and Michigan mines and year-around logging operations, employment in these industries surpassed agriculture, which was reduced further in economic importance. The manpower needs of mining and logging, when publicized through the ethnic community—especially by the ethnic newspapers and land colonizing agencies—were responsible for continued aggregation of Scandinavian and Finnish peoples in the northern forested area.

Industrial growth in the region was limited largely to a few port cities. Significant inland industrial development failed to materialize. The various lumber companies that

mushroomed between 1870 and 1920 depended upon a limited resource that was quickly expended. Consequently, sawmills, paper mills, barrel and stave companies, furniture and unfinished wood-products companies either closed or reduced operations as timber diminished, as markets varied or as transportation costs increased.

The exploitive character of the boom-time economy immediately before and after 1900 resulted in only short-term use of manpower in removal of the area's natural resources. As the natural resources were depleted, the needs for manpower, as well as for service and trade communities, decreased. Following the virtual depletion of prime mineral deposits and the removal of usable timber, a local economic depression resulted that fostered an untimely and unplanned return to agriculture. Farming, minor trades and services were the foremost employment options for persons desiring to remain in the area. For others, migration to port towns or other growing urban centers presented a new source of employment and livelihood.

Northern land has limited agricultural value. The low productivity of the soil, together with the limited growing season, prevents any gross diversification of farming. Because the northern forested area is in the hay region of the United States, dairying is the predominant farm enterprise. Part-time farming, together with village employment in some other trade or craft, is the pattern for many rural residents.

Within a 20-year period, 1910-30, the population had decreased in some area counties and stabilized in others. Later, nearly all rural farm areas of the northern counties had a net population loss as second and third generations migrated to urban centers. For the next 30 years, 1930-60, industrial growth was slight. Agriculture, mining, small-scale village industry and limited service systems provided the economic base of the northern area. Only recently, with increased use of recreational land, profitable extraction of low-grade ores and sound forest-regrowth programs, has the region noted a gradual, but mixed, economic recovery and stabilization.

Plains County, South Dakota (a special case). Plains County, situated below the North Dakota border within the fertile James River Valley, was created through territorial legislative division of Day County in 1885. Although representative of an out-low-low county, Plains County differs from the northern forested counties in that its topography is partly rolling prairie, while the eastern half of the county lies within the plateau and lakes region of the Coteau Hills (an important recreational and hunting area in South Dakota).

Originally incorporated in 1864 as part of the military reservation of old Fort Sisseton, the county served as a social center and point of dispersion for early settlers prior to the opening of the military reserve lands for settlement in 1890.

Railroads, such as the Dakota Southern, the Chicago, Milwaukee, St. Paul and the Great Northern, played an important role in land settlement and community establishment. The access provided by these railroads greatly facilitated the movement of people into the county. Moreover, the railroads created limited employment opportunities as well as supply and trade centers about which commerce and community life might develop.

Many of the early settlers were transient, interested in remaining in the county only long enough to prove their land claim. Speculation in land, rather than in some other natural resource, underlay early in-migration. Farming and agriculturally related industries have continously supported the county's economic life.

Permanent settlement and gradual community development began after 1900 when, urged by advertisements, land-colonizing agencies and favorable farming reports, new waves of German, Swedish and Norwegian immigrants moved to the county along with persons dissatisfied with farming and living conditions elsewhere in the United States. However, the speculative elements in community settlement were present; many farm settlers were tradesmen by background who planned to shift to business careers or trades after they had gained sufficient capital through farming.

Since soil, climate and growing conditions—the prime resources of the county—were appropriate, small-grain farming became the predominant agricultural activity. However, livestock raising, particularly in view of demands for beef and the growth of local livestock markets and meat processing centers, vied with other types of farm operations. Consequently, combination livestock raising, legume and small-grain farming, dairying and poultry production outline the county's present agricultural program.

More than half of the county's population is classed as rural farm, and 92 percent of the land is in regular farm use. The pattern of increased farm size is clearly evident; the total number of farms in 1959 was 117 less than in 1890. Land values show a steady increase, with average farm value exceeding $19,000.

The county's population peak was reached in 1920; thereafter, it declined each decade. Only the war years, 1940 to 1945, temporarily halted the trend in rural farm population loss. Retail trade has decreased since 1948, with a loss of 31 retail establishments. Manufacturing and wholesale commercial activity have been stable over the last 30 years.

THE OUT-HIGH-LOW AREA

Extending across the westerly base of the North Central Region is the agricultural heartland of America, the Corn Belt. The settlement of the area began before 1840, but, at the end of the Civil War, the spread of railways and mechanization of farm equipment promoted rapid settlement and homesteading of the farm land.

Since land is the major resource and farming the almost exclusive resource use, agriculture supports community life. A dispersed population, rather than a population concentrated about removable resources as in the northern forested area, characterized settlement patterns. Communities arose along major transportation and communication points as centers for the marketing of farm products.

As farm land became less available, the margins of agricultural opportunity gradually narrowed. The agri-

cultural system focused internally more and more upon technology and improved agricultural productivity, along with expanding employment in agriculturally related areas. Consequently, a slowly growing surplus population was created as agricultural manpower needs were reduced and as fewer persons were financially able to enter farming.

Farm County, Iowa. Farm County, located in west-central Iowa was settled during the last half of the nineteenth century. By the end of the Civil War, railroads provided easy access to the county, thereby stimulating increased settlement. Settlement was rapid; the county's population tripled between 1865 and 1875, and population gains were noted until 1900.

Settlement incentive was the expanse of uncultivated arable land, while community growth was geared to meeting associational, institutional and trade needs of the dispersed farm population. However, certain villages were established whose existence and labor force were not totally dependent upon agriculture but also depended on other activities, such as coal mining and railroad repair. As socio-agricultural needs for many service centers diminished, smaller communities were abandoned or stifled.

Early commercial and social activity of villages and towns centered on the seed and grain store, the railroad shops and freight depots, the general merchandising stores, lumber yards, the boarding house, the hotel and the blacksmith shop. Churches and a wide range of fraternal and social organizations cemented community relations while meeting the spiritual, social and leisure needs of the settlers.

Agriculture provides a satisfactory livelihood for the residual population. Other segments of the labor force are closely linked to or are otherwise dependent upon the maintenance of the agricultural system. Nonagricultural employment in Farm County comprises only 3.4 percent of the total employed labor force.

National trends in farming are apparent. As farm size increased, the number of farm units decreased from 2,159 in 1940 to 1,194 in 1950. Retail trade activity has declined, and only the county seat's market activity has increased, largely in accordance with losses in the smaller outlying trade centers. Manufacturing and industrial development has not increased substantially over the last 30 years.

THE IN-HIGH-HIGH AREAS

As metropolitan areas expand, adding and consolidating suburbs, a new area is created between the rural farm land and the edge of the recognized suburbs; the new area is "rural-urban fringe." Fringe areas are predicated upon continual outward extension of suburban life that brings new and old populations into contact; an older established population, with its recognized institutions and ways of life, is invaded by urban-oriented people. This process fuses two groups, although neither has the same cultural background as the other. Thus, the rural-urban fringe, although transitory, is a point of momentary articulation between "new and old."

Suburban County, Ohio. Suburban County, almost in the geographical center of Ohio, contains a metropolitan area center of more than a half million population. The zone outside the metropolitan area to the boundaries of the county defines the rural-urban fringe. Economic activity in the metropolitan center is highly diversified, including heavy industry, manufacturing, extensive retail and wholesale markets for central Ohio, and also universities, colleges and government offices.

Land use in Suburban County is twofold—open-country land used in farming and suburban land zoned and subdivided into residential and industrial tracts. The urban fringe, including both rural farm and nonfarm segments, has had the greatest increase in the rural nonfarm or exurbanite category.

Two distinct social segments form the rural-urban fringe. The area has an older, well-established farming segment ("old residents") and an insurgent, more youthful, urban-oriented newcomer set("new residents"). Higher levels of education, greater past mobility and past metropolitan residence generally characterize the newcomer.

The continued arrival of in-migrants has in many respects altered the traditional occupational profile of the fringe area, increasing the numbers of professional, technical and managerial persons. The new resident is a source of new demands upon social institutions, such as markets and schools, while differentially participating in and supporting these institutions. The differences between the two social segments of the urban fringe are further emphasized by differences in their way of life and, in particular, in their participation in, and satisfactions obtained from, community life. Since the newcomer has social contact with the older resident only at certain institutional points and, for the most part, does not immediately seek membership or assume leadership in the older institutions, the fringe-area community of the older resident does not quickly become an effective reference system for the newcomer.

Interurban County, Wisconsin. Situated on Lake Michigan at the Wisconsin-Illinois border, Interurban County lies midway between two expanding metropolitan spheres, Milwaukee and Chicago.

Unlike the other urban-fringe county, Interurban County, Wisconsin, represents a growing noncontiguous metropolitan rural-urban fringe area, with population growth due to natural increases and in-migration.

Between 1940 and 1960, the population of Interurban County increased by nearly 40,000 persons, or 34 percent. Nearly three-eighths of the growth between 1950 and 1960 was due solely to in-migration. Total rural areas in the county, and particularly rural nonfarm areas, gained the largest portion of the incoming population. Growth of population in the designated rural areas has compensated for loss of rural farm residents.

Changes in the economic structure of Interurban County have added to its occupational complexity. A full range of occupations is found within the county, with the major exceptions of a significant number of farm laborers and clerical workers. However, the variable role of nearby

metropolitan industries in attracting personnel and the development of local industries have complicated the strengths of manpower attraction. Although the industry in the county has a varying need for manpower, there is little doubt that the area can stimulate and hold future commerce and development.

Because the county seat—the principal city—although an industrial center, does not provide employment for all open-country residents, many residents work outside the county commuting daily. Local village employment absorbs other residents.

Previous residences of in-migrants in a nonurban sample indicate the high degree of suburbanization under way. Nearly 20 percent of the new residents are from Chicago or its suburbs. Prior residence in some other Wisconsin area accounts for an additional 24 percent of the in-migrants, and internal movement within the county is responsible for the remaining population trend.

The reasons for in-migration are varied but reflect fewer of the complex urban problems seen in the fringe area of Suburban County, Ohio. The search for better employment, greater job security, work in the automotive industry, and peace and quiet plus the status of owning lakeshore property are frequently cited reasons for the in-migration.

SELECTED SOCIAL CHARACTERISTICS OF POPULATION WITHIN THE THREE TYPE AREAS

MIGRATION AND THE REDISTRIBUTION OF THE POPULATION

Out-Low-Low Areas

Northern forested counties. Population losses from the out-low-low counties were high between 1940 and 1950, ranging from 9 percent in Copper County to 17 percent in Forest County. Out-migration abated somewhat between 1950 and 1960 as populations stabilized and as local developments absorbed some of the surplus population. Migration of youth, along with intermittent waves of middle-aged migrating families, made up the bulk of the out-migrants; 75 percent of the Lake County migrants were youth.

The residual population of the northern forested out-low-low counties is characterized by significant increases in the dependent age groups, particularly of persons over age 65.

The internal redistribution of county residents, primarily in the form of open-country and farm to village movement, has not compensated for village losses, since internal movement has been less, both in numbers and consequence, than any sizable out-migration.

Plains County, South Dakota. Primary population loss from Plains County resulted from out-migration, accounting for a 29.2-percent loss between 1950 and 1960. Only slight growth has occurred in the county seat. In other respects, patterns of internal migration parallel those of the other out-low-low counties.

Out-High-Low Area

Population trends during the past 50 years show a gradual decrease, particularly over the last 25 years. Although population loss is not of the magnitude of the out-low-low areas, out-migration accounts for a 17.8-percent loss in Farm County between 1950 and 1960. The only major center of population growth has been the county seat. Incorporated villages have lost between 5 and 2 percent of their residents over the last decade, while primary population losses have occurred in the rural unincorporated areas. However, total population loss has occurred at a slightly lower rate than losses from the rural farm population. Patterns of internal migration parallel those of the out-low-low counties; primary movement is away from the county, while internal movement is toward the county seat.

In-High-High Areas

Over the last two decades, population growth in the two in-high-high counties has occurred at an unparalleled rate. However, this gain involves selective component increases in the two counties. While Suburban County had a net increase of 15 percent, the rural nonfarm population is the fastest growing segment. In contrast, Interurban County, with a 15-percent county-wide increase, gained only moderately in the rural farm and nonfarm segments. Hence, the relative extent of rural-urban fringe development differs between the two counties, but their total county gains and urban gains are similiar.

Although natural increase plays a part in total population gain, in-migration is far more important. In Interurban County, in-migration alone accounted for nearly two-fifths of the increase in the rural population between 1950 and 1960. Rural and urban gains due to natural population increases between 1950 and 1960 were nearly identical in Interurban County, 18 percent and 18.8 percent, respectively. In contrast, natural increase in urban areas of Suburban County overshadowed that of the rural areas. Further, changes in the rural farm population of Suburban County, amounting to a minus 31 percent, indicate the extent to which rural areas have been annexed and through such consolidation acquired the characteristics of the urban areas.

Internal migration within the two counties reveals a threefold pattern of movement: (a) movement of urban-employed newcomers to open-country nonfarm residences, (b) the intermittent moves of a highly mobile segment of blue-collar workers from urban center to urban center, seeking low-cost residence within the urban fringe and (c) the movement of farm residents to smaller incorporated places.

Resume'

Migration is a well-established pattern in counties having low industrial development, low agricultural support or both conditions. Data indicate that these trends are long standing, while in-migration is a relatively recent phenomenon associated with industrial metropolitan

growth. Internal redistribution of the population accentuates population movement by altering the characteristics of residual populations. Migration of youth is more common than family migration, except in the in-high-high area, where young families are the migrants.

OCCUPATIONAL STRUCTURE

Out-Low-Low Areas

Northern forested counties. The present occupational structure shows traces of its former industrial and resource use, as well as the variable state of social transition occurring throughout the northern region. Employment in farming and agriculturally related occupations accounts for 27 to 32 percent of total employment. But despite variation among the counties, agriculture still accounts for sizable numbers of employed, with only a gradual decrease in importance as a full-time gainful occupation.

Over time, the white-collar segment, including professionals, managers, officials and proprietors, made up the single most stable component. While varying from 5 to 17 percent among the four out-low-low counties, the increasing number of managers and proprietors is indicative of the gradually expanding economic system and its diversification. Blue-collar workers, aside from laborers, make up from 33 to 38 percent of the occupational system and also represent the greatest source of personnel involved in intermittent and temporary in- and out-migration. Females in gainful employment account for roughly 14 percent of the total labor force.

Plains County, South Dakota. Unlike the other out-low-low counties, Plains County's agriculture holds a predominant position. Forty-seven percent of the total labor force is represented by farm operators and managers, while an additional 19 percent of the manpower consists of farm or family farm laborers. Agriculturally related occupations account for 66 percent of the total male labor force. Accordingly, agriculture in Plains County is of greater socio-economic importance than it is in other out-low-low counties, while blue- and white-collar occupations account for a disproportionately lower number of persons than in other out-low-low counties.

Out-High-Low Area

The occupational structure of Farm County reflects the predominant position of agriculture; 41 percent of the labor force are farm operators and managers, while 13 percent are employed as farm or family farm laborers. There are more farm and family farm laborers than white-collar workers. Generally, more women, or as many women as men, are found in professional occupations, and relatively more women are gainfully employed in Farm County than in the out-low-low counties. Male blue-collar workers are most heavily represented as craftsmen and operatives, accounting for 3-10 percent of the remaining male labor force.

In-High-High Areas

Because of the fusion of two distinct populations within the rural-urban fringe (namely, the newcomer and the old resident), the occupational structure reflects a transition. Newcomers belong mainly to the occupational classes of operators and craftsmen. Manufacturing and construction are the predominant sources of industrial employment for the newcomer.

In both rural-urban fringe areas, farm operators and managers constitute the largest single occupational class among the old residents, about 57 percent. Only 10 percent of the newcomers are engaged in agriculture, but farm operator is the single largest occupational category among the Suburban County in-migrants. Further, there has been a greater number of professionals, technicians and proprietors among the in-migrants.

Labor force status of married females among in-migrants reveals a slightly higher number of women in the labor force than among the older female married population. The labor force status of old-resident females is similar to that of the other two type areas.

Resume'

In general, current occupational structures of the three type areas reflect the relative economic orientation available to, or undergoing development within, the area. As agriculture declines, industrialization does not necessarily follow in its wake, as observed in the out-low-low areas. However, as industry develops, in-migration is associated with the demands for manpower created by industrialization. In general, counties losing their population reflect systems of limited opportunity, a declining but consolidative stage of agriculture and a transitional stage in community, industrial and commercial activity. In all three areas, regardless of the extent of industrialization, the role of agriculture is declining. This is evidenced by the reduced number of persons involved in agriculture, lowered incomes derived from agriculture and fewer opportunities available for moving into agriculture.

In general, the in-high-high areas are increasing specifically in those occupational classes most deficient in the other type areas.

RESIDENCE SITUATION

Out-Low-Low Areas

Northern forested counties. Rural farm residence, although decreasing with the loss of farmsteads, remains the primary residence situation for 25 to 33 percent of the population. Village residence, primarily in and about the county seat or secondary trade centers, accounts for slightly over half of all residence types, while open-country nonfarm residence has increased over the decade.

Plains County, South Dakota. Rural farm residence accounts for 57 percent of all residence types. The county has no designated urban center. The extent of rural residence is related to the near total amount of land in farms, 95.4 percent in 1959. Population loss has, nevertheless, reduced the total percentage of persons living on farms, although village increases are not proportional to the total loss.

Out-High-Low Area

Rural farm residence accounts for 45 percent of all residence types, with rural nonfarm and urban residency

each having 27 percent. These trends have been relatively stable, although village residency has steadily increased through the intra-county movement of the aged.

In-High-High Areas

In Suburban County, 88 percent of the old residents and 78 percent of the newcomers have open-country residences. Slightly more of the in-migrants than old residents are located in housing subdivisions. Rural farm residence accounts for only 2 percent of the total population of Suburban County, while rural nonfarm residence accounts for 10 percent of the total population. Comparable patterns are noted in Interurban County, although rural farm residence accounts for 42 percent.

Resume'

The residence patterns vary widely among the three type areas. Open-country residency found in the in-high-high area has its basis in problems of housing, transportation and the location of existing employment, all factors largely unfamiliar to the open-country settlement in the other two areas. Rural farm residence continues to be the major residence type for persons throughout the out-low-low and out-high-low areas. However, to this traditional pattern of residence situation, village residence and open-country residence close by village centers is emerging as a new solution. In sum, residence patterns are strongly related to the location of concentrated socio-economic opportunity.

FAMILY MOBILITY

Out-Low-Low Areas

Northern forested counties. The extent of past residence, both within and outside the surveyed counties is varied; within the 1945-60 period, 70 percent of all Forest County residents did not change residence; for 67 percent, the county had been their birthplace. For Copper County, 45 percent had not changed residence between 1945 and 1958, but only 40 percent of the sample indicated the county as their birthplace. In general, residual populations have low mobility. However, open-country residents have had greater past mobility than village and rural farm residents.

Plains County, South Dakota. Family mobility and migration of youth, in terms of numbers, time of migration or characteristics of migrants, is comparable to other out-low-low counties, with one exception: A greater number of youthful migrants come from purely farm backgrounds. Family migration is to a great extent a two-step process: from farm to village, to an out-of-county site. More older farm residents have relocated in smaller incorporated towns than have left the county. However, these internal changes have in no sense compensated for migration of youth away from the county.

Out-High-Low Area

Family mobility is low and apparently related to the agricultural tradition. Migration of youth, rather than family migration, is far more frequent. Family mobility, particularly among rural farm families, largely involves internal movement from farms to county seats and to smaller incorporated villages. More older farm residents have relocated in smaller incorporated towns than have left the county, but these increases have not compensated for migration of youth away from the county.

In-High-High Areas

The designations "old resident" and "newcomer" have a slightly different basis in the two in-high-high counties. In Suburban County, the modal length of residence for in-migrants is between 2 and 3 years. Persons having lived in the Suburban County rural-urban fringe more than 14 years are regarded as "old residents." This relationship to tenure suggests that the population growth in the rural-urban fringe is of recent origin and that high turnover of residents is characteristic of the fringe area.

In Interurban County, most newcomers have a tenure of less than 3 years. Trailer court and new real estate tract residents have the shortest tenure, but 38 percent of the residents of the older established communities had less than 5 years residence. Further, the location of the last prior residence since marriage among present residents is divided largely between urban places and rural nonfarm, nonvillage areas.

Resume'

Considerable variation is noted in family mobility within the three type areas. Family mobility, associated with some occupational mobility, is highest in the in-high-high area. On the other hand, family mobility, but not necessarily occupational mobility, is common to the out-low-low area. Last, family mobility is lowest, but occupational mobility is highest, in the out-high-low area where the existing agricultural system is responsible for creating a surplus semi-skilled population.

OCCUPATIONAL MOBILITY

Out-Low-Low Areas

Northern forested counties. Occupational mobility is greatest among the blue-collar segment—the segment showing greatest residence mobility and shortest length of tenure in last residence situation. The blue-collar segment has the greatest tendency for intermittent movement. For the most part, the principal occupation tends to remain the lifetime occupation, with greater horizontal than vertical movement. On an inter-generational basis, more parents of present residents were engaged in farming than any other single occupation.

Plains County, South Dakota. In view of the agricultural predominance of this county, occupational mobility is relatively low among the residual population. There has been considerable stability of the occupational systems over time, and, in the absence of commercial and industrial development, the primary change in occupa-

tional profiles occurs within agriculture. Thus, population change largely accentuates the shifts in agricultural manpower needs.

Out-High-Low Area

Occupational mobility, like residential mobility, is low. As evidenced by the slight change in numbers of employees in manufacturing, commerce and retail trades, little, if any, alteration has occured in existing patterns of vertical occupational mobility. Farm operator mobility is horizontal—aside from the 12 to 16 percent permanently leaving agriculture for nonfarm work or those retiring from farming. The limited occupational structure of the county, related to the pre-eminent position of agriculture, severely restricts internal vertical occupational movement. However, the holding of more than one job is noted, particularly among the younger, low-income farm operators.

In-High-High Areas

Occupational mobility is not necessarily associated with in-migration. Rather, blue-collar in-migrants most frequently seek employment opportunities within relatively fixed occupational classes.

Resume'

Varied patterns of occupational mobility over time are apparent among the three type areas. In-migrants to the in-high-high area, mainly blue-collar and limited numbers of white-collar workers, follow shifts in location of employment opportunities. Greater occupational mobility occurs as a result of migration from the other type area counties than through in-migration to the in-high-high counties. Low occupational mobility in the northern forested counties and in Farm County is notably related to the limited occupational structure. Occupational mobility of youth appears more frequent, but of shorter duration, than occupational mobility of the middle-aged, regardless of area.

MARITAL STATUS

Out-Low-Low Areas

Northern forested counties. Over 80 percent of the families are complete (i.e., with both spouses). Divorced, widowed or separated household heads range from 9 percent in Lake County to less than 5 percent in Forest County. Many older residents are widowed, but more older families have male rather than female household heads. Sex ratios indicate that unattached, widowed or divorced females tend to migrate from the rural areas, fostering the traditionally unbalanced sex ratios.

Plains County, South Dakota. Sixty-six percent of Plains County households are whole families. More nonfarm residents than farm residents have never married. As in the other out-low-low counties, more females have migrated and at younger age than males. Most noticeable over the last decade has been the decrease in the numbers of divorced and broken families. This trend is paralleled by an increase in the number of widowed or solitary households.

Out-High-Low Area

Marital status of farm and nonfarm residents varies; while 90 percent of Farm County families are whole families, more farm residents than nonfarm residents have never been married. In general, more females migrate and at younger age than males. Younger females migrate first to the county seat, but this is usually a temporary residence. Consequently, sex ratios vary greatly with residence. Towns and villages have more unmarried females, while open-country and rural farm areas have more unmarried males.

In-High-High Areas

Notable variations in marital status appear within the two segments of the population. Nearly all newcomers are members of whole families, while more older residents have never been married or are presently widowed.

Resume'

Middle-aged to older residual and in-migrating populations are composed of whole (married) families, while most youthful migrants between the ages of 18 and 25 are unmarried. Youthful female migrants make up the bulk of all youthful migrants who migrate earlier and more frequently. Consequently, sex ratios vary greatly among the three type areas. In general, towns and villages have more unmarried females, while open-country and rural farm areas have more unmarried males.

FAMILY SIZE

Out-Low-Low Areas

Northern forested counties. Size of family varies considerably, both among the survey counties and within certain occupational classes. Lake County has an average family size of 5.24 persons, while Forest County averages 3.16. Family size in Copper County falls midway, with an average household size of 4.42. Rural farm residents employed full-time in nonfarm work have larger families than do others.

Plains County, South Dakota. Trends in size of family in Plains County are similar to those of other out-low-low counties but more closely akin to the farm family size of Farm County, Iowa.

Out-High-Low Area

The average size of Farm County families is slightly over three. There are fewer non-nuclear household members in this area than in the other type areas, and family size is lower.

In-High-High Areas

Family size has certain uniformities among the two segments of the population, although "new residents" tend to have more and younger children than the "old residents." Over one-quarter of the old residents in Suburban County families have only one child. However, nearly equal proportions of both old and new resident families had five or more children, while virtually equal proportions of Suburban County farm and nonfarm residents have one or more children. More nonfarm than farm residents have no children. Farm-operator family size in Suburban County is slightly larger than that of Farm County, Iowa, but approximates the average size of farm families in the out-low-low counties.

Resume'

Family size varies among the three type areas. Some of this variation is related to general differences in concentration in family life cycles. Residual populations tend to have larger families, regardless of the specific type of area. Migrant families tend to have fewer children, as noted in the case of the in-high-high migrants. Further variation does occur between the out-low-low and the out-high-low, the former having larger families than the latter.

AGE OF MALE HOUSEHOLD HEAD

Out-Low-Low Areas

Northern forested counties. The average age of male household heads is 47 years. However, age varies considerably with both occupation and past mobility. Full-time farm operators tend to be over 50 years of age, but rural farm residents employed in full-time nonfarm work are usually younger. Professional personnel are generally in their late 30's, while proprietors, managers and officials usually are over 50. Greater past mobility is common to the youthful segments, particularly the blue-collar workers. Villages, to a greater extent than open-country and rural farm areas, have more dependent age groups, particularly the retired aged. In general, population loss has accelerated the gain in older residual populations.

Plains County, South Dakota. The median age of the population of Plains County increased from 28 to 31 years between 1950 and 1960. The population, although becoming increasingly older without youthful replacement, is somewhat younger than populations in the other out-low-low counties. The mean age of a sample of Plains County male household heads was 50.1 years. Unincorporated villages continue to gain the older segments of the population, along with the younger, dependent age groups. The farm population is generally older than the nonfarm population, and, in this sense, comparable to the age profiles found in rural areas of the other out-low-low counties.

Out-High-Low Area

The median age of Farm County increased from 32 to 33 years between 1950 and 1960. The population of Farm County, while reflecting an increasingly aging population, is slightly younger than the populations of the out-low-low counties but older than those of the in-high-high counties. The mean age of a sample of Farm County male household heads was 48.6. Villages continue to gain older retired persons. The farm population is generally younger than the nonfarm, with more farm operators between the ages of 40 to 49 years.

In-High-High Areas

Variations in age of household heads within the two broad segments of the population most clearly reveal the direction of change in population characteristics. In 1950 the median age in Suburban County was 30.9 years; in 1960 the median age had dropped to 27.8 years. Similar reduction in the median age of residents is noted in Interurban County. The modal age of old residents of Suburban County, 55-64, is slightly above that of the residual population of the out-low-low counties. Sixty-one percent of the new residents of Suburban County are between 35 and 44 years of age. However, the combined average of old and new residents' ages in Suburban County, 45-54 years, represents a younger population than that of the two other type areas. Age of household head suggests that the majority of new families in Interurban County are in the "young and the young-middle child-rearing period," while a greater number of older families than new families belong to the "post-child period" in family development.

Resume'

As indicated by mean age of populations, those areas that tend to have a more rural population represent the older segments of the population. Farm operators of the northern out-low-low counties are generally older than those in Plains County, South Dakota, and Farm County, Iowa. In general, Interurban and Suburban counties have more youthful characteristics. However, the residual populations (or old residents in the in-high-high counties) consist of persons over the age of 45 but under 60 years of age. The majority of new families in the in-high-high area are the "young and the young-middle child-rearing" families, while families in the out-low-low and out-high-low areas more frequently than not belong to the "child-rearing and post-child stage" of family development.

EDUCATIONAL LEVELS

Out-Low-Low Areas

Northern forested counties. Educational characteristics of the three counties' residents are somewhat varied; 74 percent of Lake County male household heads have an eighth-grade education or less, while only 60 percent of Forest County male household heads have an eighth grade education or less. Greater uniformity is observed among the counties relative to percentages of persons having completed high school; roughly 20 percent of all male household heads have completed high school. This educational uniformity is particularly noted among male household heads between the ages of 30 and 40. Generally the educational attainments of females in these counties are higher than those of males, except among the older residents, where more uniformity exists.

Plains County, South Dakota. Thirty-one percent of all farm operators in Plains County have an eighth-grade education. But nonfarm residents are more likely to have and eighth-grade education or better, while farm residents more frequently have only an eighth-grade education or less. In other respects, education of male household heads is comparable to the other out-low-low counties. Level of education of females is higher than for males, but comparable to that in northern forested counties.

Out-High-Low Area

Farm County has a high degree of uniformity in level

of education of married males. Only 30 percent of the farm operators in Farm County have less than an eighth-grade education. More residents of Farm County have higher levels of education than do residents of the out-low-low counties. But a parallel in educational attainments exists between the two areas in terms of farm and nonfarm classes. There are no outstanding differences in levels of education between males and females.

In-High-High Areas

"Old" residents have less education than the newcomers. Eleven to 12 years is the modal educational attainment of male household heads, including both new and old residents. Newcomers, with certain exceptions, represent college or technically trained personnel. Educational levels of old-resident male household heads approximate those of male household heads of other areas, but the educational levels of new residents represent a recent build-up of highly educated persons having no sizable counterpart in the out-high-low or out-low-low areas. New-resident female household heads have higher levels of educations than old-resident counterparts. However, the variation between the two classes is greater for females than in the case of male household heads. Not only are the extremes in educational levels more noticeable, but, in addition, the levels of education are generally higher for women than for men. Old-resident male and female educational levels parallel each other more closely than those of new male and female residents.

Resume'

Certain uniformities in educational attainment are observed in residual and old-resident populations of all three type areas. Migrants and in-migrants have slightly higher educational levels. Married females from the in-high-high area, aside from old-resident females, tend to have higher educations than women from the other two areas. Educational attainment appears inversely related to length of tenure in the community but directly related to level of living.

INCOME AND LEVELS OF LIVING

Out-Low-Low Areas

Northern forested counties. Family income varies among the surveyed counties and even more noticeably among segments of the population. Purchasing income per family varies from $3,918 in Copper County, Michigan, to $2,778 in Forest County, Minnesota. Full-time farmers and farmers with part-time nonfarm work—a sizable population segment—earn less than $2,500 a year. Those whose *sole* occupation is farming appear to represent an economically depressed segment. In Lake County, 48.3 percent of all farm families receive low incomes, while 22.6 percent have only subsistence incomes.

Levels of living vary primarily in terms of residence situation. Village residents have the highest incomes and levels of living, followed by open-country and rural farm residents. Moreover, the closely ranging levels of living are revealed in the flatness in social stratification—a condition related to the bulk of blue-collar and farm occupations comprising the population.

Plains County, South Dakota. In 1950, 58 percent of all commercial farm units in Plains County reported sales of between $5,000 and $19,999, but by 1959 only 44 percent of all commercial farms were reported in these classes (Census Economic classes III and IV). As a result, there has been a significant increase in the number of lower-income classes of farms, Census classes V and VI. In this respect, despite the downward moving position, the role of agriculture is still greater than that in the other out-low-low counties. The drop in income has not substantially altered levels of living. In 1959, the median family income was $3,126.

Out-High-Low Area

Farm incomes have decreased noticeably between 1950 and 1959, as evidenced by trends in the percentage of commercial farms per Census Economic class. Farm County has reduced the percentage of subsistence farm units, with an accompanying percentage increase in commercial farm units of Census Class IV, from 19.6 in 1950 to 33.4 in 1959. The percentage of Class IV farms decreased by 8 percent over the decade. However, more farm operators than not indicate that their incomes either remained the same or decreased slightly during the last 12 years. Persons employed in manufacturing or production in Farm County averaged $2,277 in 1950-59, an income below the average farm-operator income for the same period.

The Farm County farm-operator level of living index was 182 in 1950 and increased to 193 in 1954. These indexes are well above both the Iowa and the United States average and higher than in the out-low-low counties.

In-High-High Areas

Notable differences appear (a) between segments of the rural-urban fringe population and (b) between the in-high-high counties and other type areas. While the modal income range of all residents in Interurban County is $5,000-$6,000, more new residents than old residents have incomes in excess of $6,000. Sixty-seven percent of all new residents in "Pleasant Homes" community (a typical suburban housing development) have incomes of $6,000 or more. Although this affluent segment represents only a part of the population, it has no similar counterpart in the out-low-low areas. It does, however, have a near counterpart in the percentages of high-income farm operators in Farm County, Iowa. Rural-urban fringe farm-operator incomes represent a middle-to-upper income level, $5,000 to $19,999, with few subsistence farms and farms of Census Economic classes I and II. While the level of living of rural-urban fringe families varies with certain economic, educational and social factors, high living standards generally characterize the new residents. Old residents, to a greater extent than newcomers, have a level of living akin to middle-income families in the other type areas.

Resumé

In general, traditional differences in income and level of living are preserved in differences among the three type areas. Those areas having a high level of industrial development tend to have high levels of living, while areas of low or mixed industrial development or primarily agricultural areas, such as the out-low-low areas, tend to have low to only average levels of living. In counties where agriculture is predominant, stable to high levels of living have been preserved through reduction in the number of subsistence farm units with increases in certain high-income farm classes. Old residents and residual populations, regardless of area, have a similar level of living—between $2,500 and $4,500 annually. However, in the in-high-high counties, newcomers bring a new level of living not found in either of the other type areas.

SOCIAL PARTICIPATION

Out-Low-Low Areas

Participation in voluntary associations is relatively low, and diversity of voluntary groups is limited. Cooperatives, farm organizations, church groups and veterans clubs generally outline the typical pattern. Further, membership in these associations is noticeably declining. Older residents have a greater number of past associational ties than younger residents, but now have reduced their participation. Civic and business-related associations, such as the chambers of commerce, are the only types of associations growing in membership. The relationship between population loss and declining social participation is linked more closely to loss of stimulus in these groups than to population loss *per se.* Similar patterns are noted in Plains County.

Out-High-Low Area

High participation in various voluntary associations and the strength of these groups distinguishes Farm County from the out-low-low and in-high-high counties. A wide variety of social service, fraternal and interest groups exists, and membership in voluntary associations has increased, rather than decreased, over the decade. Moreover, farm residents have greater involvement in voluntary associations than village residents. But more village residents have a wider range membership in groups, but less leadership participation. Village women are more actively involved in a greater number of voluntary associations than rural housewives, but women, regardless of residence, are more active in community associations than men.

In-High-High Areas

Old residents, to a greater extent than new residents, are active in associations and institutions. However, new-resident married females engage in more semiformal participation than new-resident married males. New residents most frequently participate in associations outside the immediate community, while old residents form the core of local associations. Contact between the old and new residents through local voluntary associations, formal institutions and semiformal activity is low; hence, no extensive integration of these segments of the population has been achieved on this level.

Resumé

Social participation in community institutions is higher in the out-high-low and in the out-low-low counties than in the in-high-high counties. Because of the rapid turnover and build-up of population, interpretation of social participation in community institutions of the in-high-high counties is difficult.

PROFILE OF YOUTHFUL MIGRANTS

Out-Low-Low Areas

Forty-eight percent of Forest County families had one or more children living away from home. This figure is typical of the northern forested area. More young females than males have migrated from Lake and Copper counties. In Forest County, however, the sex ratio of youthful migrants is nearly identical. While the mean age of youthful migrants is slightly over 19 years, temporary youthful migration generally occurs before the nineteenth birthday. Only 36 percent of the youthful migrants from Forest County complete high school or have additional education, while 65 percent of the youthful migrants from Copper County have a high school education or better. Youthful migrants from Lake County have no significantly higher educational backgrounds than do the youth who remain in the county. The movement of the youthful segment of the population is more frequently from the county than within the county. Since marriage removes a certain segment of the youthful migrants, most youthful female migrants are reported as full-time housewives; among males, no single predominant occupational pattern is observed. Only 12 percent of the youthful male migrants of Lake County have entered farming, and no youthful male migrants from Forest County have entered farming. Data indicate that, despite removal from the parental home, a high degree of contact usually is maintained.

The reasons for migration of youth are varied, but the main reasons, in order of frequency, are as follows: the search for employment or better job opportunities, military service, marriage, additional education and following friends or relatives. Parents generally agree that the migrants will not return to their home county and that the migrants are better off where they are than in the home county.

These traits also are noted among youthful migrants from Plains County, except that more Plains County youth have farm backgrounds.

Out-High-Low Area

Generally, more female than male youth leave Farm County. Seventy percent of the youth have established permanent residence away from the county over a decade. Thirty-five percent of the youth migrate before their

twentieth birthday, but 47 percent migrate between the ages of 20 and 25. Thus, migration of youth is more prolonged in Farm County than in the out-low-low areas. More nonfarm than farm youths have a high school education.

The migration pattern of youth, particularly females, is frequently a two-step process involving a temporary work residence within the county followed by permanent out-migration. Marriage removes nearly 62 percent of of the youthful migrants; more nonfarm males than farm males have migrated, but not married.

Although more youthful migrants from Farm County than from the out-low-low counties have had some work experience before migration, clerical work is the major type of job experience of the youthful migrants. After migration, no single occupational pattern is observed among the youth. However, more youthful nonfarm migrants than farm migrants over 22 years of age are unemployed. Regardless of past background, farm employment is not a major source of livelihood for any significant number of the migrants.

Youthful migration does not completely sever former community ties. There is a tendency for the younger migrants to visit their home communities more frequently than those who migrate at an older age. Also, more youthful male migrants than female migrants frequently visit their home community. A differential use of the home community as a slowly diminishing reference group is suggested by the variation in home community contact between the sexes. Nonfarm female migrants are less prone to extend contact with the home community, although marriage is a prime factor here. The primary reasons given for migration of youth from Farm County, while varying with the age of the migrant, closely correspond to those provided by youth of the out-low-low counties.

Resumé

Youthful migrants to a greater extent than any other group characterize the type of migrants from the out-low-low and the out-high-low counties. These youth between the ages of 18 and 25 account for 47-60 percent of all migration from these areas. In general, nonfarm youth tend to have a higher education than farm youths who migrate. Youth migrate in search of jobs or educational opportunities, because of military obligations or as a result of marriage. Youthful female migrants tend to move at an earlier age than their male counterparts; however, their migration is more segmental and extended than that of the young male migrant. Regardless of type of area, migrants tend to retain a high degree of contact with their home community during their youth. Most young migrants have had little, if any, occupational experience before their first move Few, if any, of the youthful migrants find permanent employment in agriculture.

SOURCES OF IN-MIGRANTS

Regardless of exact source, in-migrants most frequently indicate a last prior residence within some metropolitan center. Sixty-six percent of the in-migrants to the Suburban County rural-urban fringe came from the county's metropolis or its suburbs. Nearly 25 percent of all in-migrants to Interurban County came from urban areas of over 50,000 population. However, in the case of Interurban County in-migrants, small and middle-sized communities of 2,500 to 24,999 population provide as large a percentage of new residents as the rural nonfarm (nonvillage) area. Interurban County receives considerably more new residents from out-of-state than does Suburban County, but this difference can be explained partly by the geographic position of Interurban County.

MIGRATION INTENTIONS

Out-Low-Low Areas

A statement of migration intentions of the residual population is not easily presented—intentions to migrate vary, not only with community satisfaction, but also with level of living, age, occupation, number of children in the family, stage of family development and community commitment. However, among the residual populations, more persons than not desire to remain in the community. Most residents surveyed indicate that they will spend the rest of their lives, including retirement, in their present community. In general, persons with the lowest levels of living indicate the strongest desire to remain in their present communities, regardless of their assessment of community satisfaction.

Those persons who would seriously consider migrating represent two distinct segments of the population: first, a youthful, early-family-stage, white-collar segment, having a past history of mobility; second, an older, late-family-stage, near-retirement group, who desire low-cost living near children or relatives. The blue-collar workers and farm operators present the least well-formed statements of migration intentions.

Out-High-Low Area

Most of the residual population of Farm County have only vague or unformulated migration plans. Most residents, given the fictional option of remaining or leaving their present residence, would prefer to stay. However, older farm residents, to a greater extent than village retirees, anticipate some change in residence immediately before or after retirement. Over the last decade, those persons who would migrate and who were able to migrate, particularly the young family and the older retirement family, have migrated. Thus, the residual population has already largely been and continues to be, thinned of those persons unable to enter agriculture: the youth, retired farm families and middle-aged persons unable to find employment and livelihood in the villages and county seat.

In-High-High Areas

In-migrants indicate no immediate intention of leaving their present residence community. But in Interurban

County, Trailer Court residents to a greater degree than other residents indicate that they will migrate within the next 5 years. Similarly, slightly over 20 percent of the new residents of Suburban County indicate that they are planning to leave the rural-urban fringe area. Few old residents indicate a desire to leave. Farm operators, regardless of whether full-time or part-time, indicate a desire to remain within the Suburban County rural-urban fringe area. By comparison, more older residents of the rural-urban fringe areas strongly desire to remain in their present residence area than do members of the residual populations of the other two type areas.

COMMUNITY SATISFACTION

In general, regardless of the type of area, most residents indicate that they are satisfied with their communities and with the services and institutions provided. However, there is no blanket acceptance of the adequacy and desirability of all aspects of community life.

Throughout the out-low-low counties, the lack of employment opportunity, low industrial development, low incomes, declining social institutions, heavy youthful migration and the eroding of community life have fostered a tenuous balance of optimism and defeatism. Older residents of the out-low-low area, rather than middle-aged and younger residents, are more satisfied with community life and services in general. However, more professionals and white-collar persons who live in the area are dissatisfied with community life and make attempts to alter, implement or vitalize existing programs to improve conditions where possible.

In the in-high-high counties, again, more old residents are satisfied with existing conditions of community life than are newcomers to the area. Much of this dissatisfaction with community life may be related to the low involvement of the in-migrants in the existing social institutions; many feel like outsiders and act accordingly. Differences in social characteristics and cultural backgrounds among the residents, both new and old in the in-high-high areas, serve further to alienate the two segments of the population, keeping them socially distinct.

In the out-high-low area, county improvement, better village services and improved means of communication have fostered community satisfaction among the rural residents. Village residents for the most part, however, have a more cosmopolitan orientation and are able to find more faults and problems with the existing communities and services.

In general, persons most satisfied with their communities do not have migration intentions. Those persons least satisfied with their community do indicate some future intention of migration, although dissatisfaction is only one factor prompting a desire to move. Further, migration intention and community satisfaction are directly related to level of living. Those persons having the highest level of living and indicating the highest level of community satisfactions may also indicate some future desire to migrate. This is particularly true for persons nearing retirement age. However, among those persons who have a middle to high level of living and who indicate high community satisfaction, there is also a wide segment that indicates no migration intention. The persons who indicate the greatest willingness to migrate are those who have the lowest level of living.

SOCIAL COSTS OF RESIDENCE

Out-Low-Low Areas

Local factors, for the most part, create community satisfaction or dissatisfaction and, hence, social costs. Differences in rationalizing nonmigration, as evidenced through statements of the advantages and disadvantages of remaining in the northern area, indicate that the residual population as a whole is not completely dissatisfied with living conditions. Many persons do not wish to live elsewhere, although many would like improvements. For many middle-aged adults, the lack of opportunity facing the youth, the chronic low levels of living and the absence of industrialization are "givens"; these are factors that do not either directly or seriously affect a large segment of the residual population.

The acceptance of migration as a legitimate strategy for youth does not necessarily affect the assessment of social costs for the older resident population. Intergeneration changes in aspirations have also been accepted. Thus, loss of the youth is largely taken for granted but does not necessarily stimulate migration planning in older generations, whose satisfactions are gained from other aspects of community living and whose aspirations are geared to the local community and its culture.

Out-High-Low Area

Deprivation, if based largely upon limited service systems, can be sustained over time if certain compensations gradually correct and improve conditions of life. Social costs among residents in Farm County have been minimized as gradual improvements in institutional service and means of access have been made. Notions of relative isolation, lack of contact with the urban world and cultural deprivation have been largely removed through communication and the diversification in community systems. As transportation has improved, bringing the rural world in closer contact with and dependence upon village and urban life, there are more farm and village transactions, yielding more positive attitudes of community service by all residents.

On the other hand, more and more persons are unable to enter farming and its village-related economy. Given the consolidating trends in agriculture, coupled with increased vertical organization of agriculture, the diminished opportunities of the community and its capability to expand and sustain diversification have resulted in greater restriction on means of livelihood. Youth are particularly subject to these conditions of community life.

In-High-High Areas

Social costs of residency in the rural-urban fringe are often minimized by proximity to urban culture and social opportunities. There is no apparent lack of occupational diversity, no limited service system and no indication of unstable economic growth. New residents in the rural-urban fringe represent a segment of mobile American mass society. Trailer living or residence in new urban housing developments symbolizes the in-migrant—the fluid blue-collar, technician and professional-managerial classes. Social costs involve a rootlessness of living and the desire for preserving the future capability to migrate as a means of upward mobility. New residents, for the most part, represent an unintegrated population, somewhat indifferent to or taking more than it contributes to existing institutions. The rapid influx of migrants, by sheer numbers alone, prohibits immediate absorption into the life of the community. In-migrants tend to retain their ties and affiliation in former areas of residence, particularly when the migrants come from metropolitan centers. New residents tend to form subcommunities, systems of semi-formal interaction, within the already existing associations and institutions. New residents, more than older residents, believe that considerable time must elapse before one is designated an "old resident."

Old residents, whose social and community interests lie in the already established community life, view the newcomers as a source of "new blood" and new money but also as a disturbing and unpredictable threat to the continuity and stability of already well-established community patterns. As a result of the differences in background, education and occupation, the old resident more and more becomes the marginal person in social systems undergoing transition—older residents do not share in the value system of the urban-oriented in-migrant. Consequently, residents are largely stratified by tenure and identified by the characteristics that tenure connotes. The old and new residents have few associational contacts, and institutional participation varies with length of residence. New residents have achieved an adjustment in cosmopolitan exclusiveness, while old residents retreat to the exclusiveness of the "old community."

In sum, social costs among in-migrants are low, and the necessity of in-migration is easily rationalized as a pragmatic solution to working conditions and work-residence proximity. Despite the limitations of community services, in-migration is viewed as only a momentary residence within a larger and necessary sequence of upward mobility.

IMPACT OF POPULATION CHANGE UPON SOCIAL AND INSTITUTIONAL SYSTEMS

ECONOMIC SITUATION

The rate of growth and stability of a population is related to the segment of the economy that is most developed, whether agricultural or industrial. Where industrial growth is noted, population growth is accelerated, while agriculture may gradually decline or reach a new equilibrium. Where agricultural growth is noted, or forms the basis of the economy, population growth is more slow, and greater stability occurs unless technology interferes with the agricultural sector of the economy.

In the North Central Region, certain areas are noted for their dependence upon agriculture; others, for their industrial growth; and still others are mixed. In each case, population trends are slightly different, even as the composition of the population varies from area to area, in relation to the dominant sector of the economy.

Changes in an economy induced by population change can be modified by the basic form of the economy. Industry may aid in an agricultural adjustment, even as agriculture may postpone or buffer the effects of sudden population change in the absence of supporting industry. The social response of the economy depends upon the importance and strength of each segment of the economy. Agriculture, if marginal, cannot support an area if there are few industrial developments or natural resources to encourage industrial growth. Small-scale industry cannot support a period of high agricultural adjustment.

The social effects of population change further depend upon recognizable changes in the demographic characteristics of an in-migrating or residual population. For example, a continued build-up of the two highly dependent age groups may alter the demands upon a local economy. Last, population change may produce local effects that are masked by national trends, and thus be obscured within patterns only indirectly related to population shifts. In view of recent economic trends, many observed relations, seemingly stemming from population change, are better jointly linked to economic and demographic factors rather than causally separated.

Out-Low-Low Areas

Northern Forested Counties

Economic history. Forest and Lake counties have similar socio-economic histories. The early settlement of both counties is linked to the lumber industry, and both underwent decline after this resource was exhausted. Thus, both have had variable phases of early growth, peak and long-term decline. In terms of county economy, agriculture plays an important role in both counties; dairying is the major farm specialty. The sandy soil, limited growth season and severe climate prevent much farm diversification. Also, both counties are endowed with high recreational potential; the lakes, rivers and wildlife of the counties are emerging as prime, untapped resources.

Early settlement was geared to logging operations. Once this resource was removed, growth and manpower needs were curtailed. Gradually, agriculture was developed as

an economic compensation for the lumber industry, although logging and wood-product industries have never completely ceased operations. Between 1920 and 1940, two adjustments occurred: many residents moved to the Duluth-Superior area and inland centers in search of employment; other residents, having begun small-scale farming, became more committed to farming. Commerce suffered with the removal of the lumber industry. Business investment fell off during the 1920's and '30's and diversification of the economy was inappropriate, given the uncertainty of the future of the rural northland.

Contribution of agriculture. Forest County is agriculturally underdeveloped. Farming provides a low income for most operators, and most farmers hold part-time nonfarm jobs. Over the last 30 years, the number of farms has decreased, largely through outright abandonment. Lakeshore property is more valuable per acre than farm land. Although farm size has increased within the last 2 decades the rate of increase is only slightly below the rate of abandonment. There is an unusual tenacity among small farmers to stay in farming despite low income. This land orientation is linked to the ethnic background of many residents for whom land ownership and occupancy is valuable in its own right. Over 50 percent of Forest County's farms are designated as "unclassified." Dairying accounts for 35 percent of all commercial farms.

Conditions in Lake County are comparable to those in Forest County, except that dairying plays a greater economic role. In 1940, 27 percent of the county's land was in agriculture, although 60 percent of the total land is not suitable for agriculture. In 1940, 49 percent of the county's 2,800 farmers depended solely upon farm-derived income. In 1954, no sizable change was noted in the percentage of land devoted to agriculture, but fewer persons depended upon farming as their sole means of income. Thus, the imbalance between human and land resources was altered by off-farm employment as well as by out-migration.

Agriculture, although the least productive source of income, remains the largest single industry in both counties. Consequently, industry, even small-scale industry, contributes a greater proportionate share of the county's economic strength.

Out-migration, particularly off-farm migration, is frequently preceded by off-farm employment. In 1954, 53 percent of the Lake County farmers held nonfarm jobs, a 5-percent increase over 8 years. Average cash income from farming in 1954 amounted to $2,600. Off-farm income averaged slightly over $1,200. Thus, the impetus to migration begins with income deficiencies in agriculture, leading to a search for employment and income supplement. The range of income activities in nonfarm work is not extremely wide. Such work is often seasonal, representing variable manpower needs.

Commercial and industrial components. Only the county seats have sustained a diversity of products, goods and services. Their trade center character, in most instances, overshadows all other county trade centers. The remaining commerce in the counties occurs in crossroad and primary trade centers, usually located near recreational or former logging centers.

The consolidation of trade centers and the gradual centralization of trade activity in the county seat extends back to the 1930's. Since that time, no substantial change has occurred in trade center behavior, although residents feel less loyalty to the county seat as a trade center. County seats cannot compete with larger markets within a 100-mile radius.

Industrial and retail trade patterns have fluctuated during the last 2 decades, with a gradual decline in local industry, except for the increase in tourism. Employment in retail trades has decreased over the decade at a faster rate than actual unit loss in business. But, despite losses in employment opportunities and commercial units, many remaining trade outlets report increased dollar volumes. Manufacturing and construction have had the greatest setbacks, although these have been chronically unstable in the rural northlands.

Impact of population loss. The more visible reaction to population loss occurred during the first extensive waves of out-migration during the 1920's. Since that time, economic decline has been less noticeable but nonetheless continuous. The major effect of population loss is the removal of a service population. The county's retail trade stores have scaled down services and goods to the point where further reduction means termination. The result of selectively diminishing dollar volumes has been small-scale diversification. Firms designed to meet vacationing and resort needs are highly diversified, although there is no great depth in diversification of service.

The major adjustment of business units to population loss and changed consumer demands involves reduction. This reduction has created a keenly balanced market situation wherein local business units are competing with distant markets for a diminishing number of consumers. Greater reduction of goods and services offered would tip the balance toward extra-county markets. This pattern is evident in Forest County, where reduction in county seat units has forced a larger trade area upon residents. The result has been a further economic loss to the county seat. However, tourism offers some compensation. The remaining business units in the counties do not participate greatly in the national and state economic trends. Instead, local demands for services and goods determine the character of business to a greater extent than extra-county patterns. More businessmen are concerned with merely "holding the line" than with expansion or growth. Moreover, despite the length of time over which population loss has occurred, most businessmen are unable to identify the source of their business problems. Few cite population loss as a factor, although objective evidence clearly links population loss to declining economic activity, even as the present lack of socio-economic opportunity prompts out-migration.

Plains County, South Dakota.

Unlike the northern out-low-low counties, agriculture is pre-eminent in Plains County, although an agricultural adjustment is under way. Consequently, Plains County represents a type of area between a typical northern out-low-low county and an out-high-low county in most respects.

Agriculture. Agriculture is the dominant segment in Plains County economy. However, the county is gradually losing the support of its agricultural system through farm consolidation, with no help from the industrial segment. Between 1930 and 1959, the number of farms in Plains County decreased; over 32 percent of the farms operating in 1930 did not exist in 1959. This decline in number of farms is slightly greater than that in Lake or Forest County and reflects widespread consolidation of farm land.

Between 1940 and 1959, the average size of farm increased nearly 40 percent. Thus, both size and number of farms, as joint indexes of agricultural support, suggest that the county's agricultural system presents fewer opportunities and has reduced manpower needs. In short, the agricultural value of the county remains high but is increasingly closed to small-scale, marginal farm operation. This trend is linked to specialization, particularly in terms of beef farming among the top farm operators.

Land values. Between 1945 and 1959, the per-acre land value increased $30, from $21.51 to $51.51. (Land in Plains County is slightly more valuable than land in Forest County and nearly equal in value to land in Lake County. The difference between Lake and Plains counties' land values may be due to the difference in agricultural emphasis—the difference between dairying and beef cattle raising.) Since the value per acre is relatively low, increased farm size, coupled with reduced numbers of farms, has tended to accelerate the increase of average value of farms. On a per-farm basis, farms including improvements are higher priced in Plains County than in the other out-low-low counties.

Characteristics of commercial farms. Along with increased farm size, farm incomes of commercial farms in Plains County reflect significant changes between 1950 and 1959. First, Census Class VI farms (with sales of $50 to $2,500) increased from 5 to 15 percent between 1950 and 1959. Class V farms increased approximately 16 percent, while Class III farms (with sales of $10,000 to $20,000) decreased 15 percent; similar decreases are noted in Class II farms. Increased farm size, however, is not uniformly associated with increases in top-class commercial farm operations.

Patterns of off-farm work. Between 1950 and 1959, an approximate 40-percent increase occurred in the number of farmers engaged in part-time farm work. Similarly, semi-retirement doubled, and the number of noncommercial farms increased by nearly 12 percent. These trends over the decade indicate a gradual but selective decline in agriculture, roughly related to the rate of diversification in farm operation.

Plains County has had a relatively stable percentage of farm operators and managers represented in the total labor force. In 1940, 14.7 percent of the population was engaged in agriculture; in 1959, 13.2 percent were so employed. This stability is in contrast to the decreasing numbers of persons engaged in agriculture in the other out-low-low counties. This relative stability in agriculture suggests that migration, while affecting the agricultural segment of the population, has eliminated the small farm operators; replacement in the agricultural system has not occurred.

Commerce and industry. The decline in agriculture, as well as a shifting balance between agriculture and industry, is reflected in trends in sources of income for the 1957-59 period. In 1957, agriculture was the major source of income for 46 percent of the county's residents, while 30 percent derived their income from trade and 8 percent from government service. By 1959, however, agriculture was the major source of income for only 27 percent of the county's residents—an 18-percent decrease in a 2-year period. At the same time, trade, as a major source of income, increased 6 percent (36 percent), and government increased 3 percent as a major source of income during the same 2-year period. This modification in income sources for county residents is unique to Plains County. This pattern does not correspond to balances between agriculture and nonagricultural employment in other out-low-low counties, largely because the northern forested out-low-low counties have not had as fast a rate of agricultural adjustment within so short a period of time.

Economic trends in Plains County between 1957 and 1959, however, do not parallel those in South Dakota as a whole. The changes in Plains County represent an accelerated decline in the position of agriculture within a very short period—mainly a decline in marginal farm operation.

Commercial units. In 1930, the county's 11 villages had 121 business units. With only slight change, the number of business units was maintained until 1950, but a loss of five units occurred from 1950 to 1960. The commercial units lost during the past 30 years are similar in class to those lost in the out-high-low county and the out-low-low counties studied; namely, retail, food and miscellaneous stores and restaurants. In contrast, automotive services, trucking and transportation have increased from 1930 to 1958. Consolidation of services appears less frequent than actual liquidation and termination of operating units. In this sense, the pattern of commercial decline parallels that of Forest and Lake counties. However, decline in business units is not uniform throughout the county. The county seat has more or less held its own and even increased certain commercial lines. Thus, primary business loss, associated with the reduction in the rural service population, has resulted in moderate realignment of commercial services in the outlying villages and the county seat.

Out-High-Low Area

Farm County, Iowa

Economic history. The settlement of Farm County was linked to its largely untapped agricultural potential. Between 1870 and 1895, settlers poured into the county. In 1890, the county's population exceeded that of 1960. Settlement was aided by the railroads with the development of railway repair and coaling stations that later developed into the county's market centers.

Subsequent growth of the county's villages was linked to agricultural development, although the county seat rapidly outstripped outlying villages in size and economic importance. By 1900, the first population readjustment was signaled, as settlers began a slow exodus from the county to other Iowa farming and urban areas.

Effect of changing population composition. Out-migration has been highly selective over the past 60 years, resulting in a population pyramid with a heavy concentration of older persons. The population profile shows a lack of replacement of younger persons, particularly of those between 25 and 35 years of age. The excessive numbers of dependent aged persons alter the birth rates, living standards and dependency ratios. The county seat has more older residents than any other area in the county. In 1940, 12 percent of the county seat's population was 65 years of age or older, but, by 1960, 18.7 percent was of this age bracket.

Population loss has reduced the number of households, while creating a notable housing need because of the retirement and relocation of older persons from farms. This movement adversely affects the dispersed economic units and the economies of smaller villages by reducing the demand for services and other market needs. Consumer patterns are markedly altered, since the high proportion of older persons and their move to the county seat adversely shift the balance of consumer trade activity. This is particularly noted when pre-existing patterns of economic activity depend upon a favorable balance of occupationally-oriented residents, rather than retired and non-occupationally-oriented residents.

Trade areas. A clear-cut measure of the differential impact of population change has always been the expansion or contraction of trade centers. As a consequence of the rapidly improving transportation systems, greater freedom of movement and trade centralization, the territorial bounds of trade centers in Farm County have been relatively fluid. Nevertheless, trade area boundaries reflect gradual concentration within the county-seat trade community, with concomitant loss to nearby village trade centers. The outlying village centers share only in the economic overflow from the county seat as constellations of the primary trade center, rather than as self-sustaining centers in their own right.

Manufacturing. Existing trade centers of the county function primarily as centers of supply and markets for surrounding population. At no time has any of the county's villages maintained a diversified base of industry or manufacturing. Before the consolidation of rail service and repair centers, the railroads provided certain employment. County government, on the other hand, might be considered a major "industry," given the increased numbers of persons in government jobs. Agriculturally related industries—egg packing plants, grain and feed stores, tractor sales and repair, etc.—represent the only basic industries. But these industries are not diversified or sufficient to withstand gross economic decline. Accordingly, agriculture, rather than industry, provides the balance, if not the base, to the county's economy.

Business service units. The cushioning effect of the predominantly agricultural economy is evident in the failure of the county's dispersed business units to participate in the national trend toward business consolidation. Nationally, retail stores have grown larger in terms of consumer population and sales volumes, with the result that population per store increased from 74 in 1939 to 97 in 1958. In contrast, both total population and the number of business units have declined in Farm County. The decline in number of stores, however, has been proportionally less than the population decrease. Thus, the relative decline in number of business units has been less than the national average, and the population increase per store in Farm County has been less than the national average. Total retail store sales volume has increased greatly in the county and may be due in part to a growing number of older "captive" consumers unable or unwilling to purchase elsewhere. The increased total dollar volume, however, is dispersed among sales per store that are consistently smaller in Farm County than in the state or nation as a whole.

The number of persons employed in retail trades also has decreased, and, regardless of an increased service base per retail store, fewer and fewer persons are able to find employment in business establishments. This is in contrast to the increasingly complex national organization of retail trade. Even so, in comparison with national averages, there are fewer people in the population of Farm County for each person employed in retail trades. Also, given the population trends of Farm County, persons employed in retail trades work in stores that serve increasingly smaller numbers of people.

Farm County retail stores have less over-all specialization of products, services and division of labor and a structurally less complex business system than other commercial units in the state and nation. Accordingly, business units in the county do not participate heavily in the rapid business development and greater sales volumes that characterize the more economically vigorous areas of the state and nation.

Trends in services offered. In range of retail services, national trends reveal various shifts in consumer tastes and habits that parallel changes in levels of living, in marketing and in advertising efforts as well as changes in retail organization designed to meet new consumer demands. Nationally, the numbers of apparel, eating and drinking, furniture and household appliance, lumber and building materials, automotive and miscellaneous businesses in-

creased markedly between 1939 and 1958. Numbers of food stores and gasoline service stations decreased in this period, with notable reduction in the number of smaller food stores.

In Farm County, the apparent stability of retail units (particularly of merchandise stores) belies an important economic change. Nationally, the small general store has all but vanished under the economic challenge of the larger merchandising and discount stores; not so in Farm County. In other areas of retail trade, however, Farm County's economic units tend to follow national trends, with only minor exceptions, in the range of services offered. Automotive outlets in the county increased 56 percent, and the number of eating places increased 15 percent over the past 15 years. Retail trade categories showing national declines also are evident in Farm County, although the declines are most pronounced in the county's smaller villages. In contrast to certain retail trade declines, the livestock, feed and fertilizer businesses and retail trades geared to the agricultural economy have grown in response to changing agricultural technology.

Intracounty trade trends. Although consolidation of trade center activity has been concentrated in the county seat, the peak of this consolidation was passed in the late 1940's. But after 1948, sales volumes in selected retail stores of the major trade area, the county seat, fluctuated more rapidly than economic patterns elsewhere in the county. Economic units in the outlying villages tend to have a greater stability (with neither apparent growth nor decline) than economic units in the county seat. The greater instability of the county seat business units suggests a greater turnover among firms, involving an unplanned rotation of sales products, services and even personnel not too unlike an economic version of "musical chairs."

Problems in economic and business activity. Lack of employment opportunities is cited by most businessmen as a chronic problem in Farm County. This problem is notably related to a second—the inability of local business firms to sustain a pay scale that encourages young people to remain in the county communities. Few, if any, businessmen mention population decline as a specific, concrete factor affecting their economic position; most businessmen report a general satisfaction with their dollar volumes over the past decade. Moreover, businessmen do not perceive a link between ongoing population change and any income change. The socio-economic impact of population change might be more painful and obvious were it not for simultaneous changes (not directly linked to population change) occuring within the economic system. Hence, the impact of change in the national market system that has affected organization and policy in business firms in the county is not immediately related to a locally shifting population base.

The latent problem of population change, coupled with product and market changes, involves efforts of businessmen to identify the causes of their own dilemma. Changes in consumer needs are partly understood as factors affecting consolidation, slightly altered dollar volumes, etc., but businessmen do not perceive the total combination of factors affecting local economy, much less the dynamics of population change in relation to the curtailment of business activity and the new scheme of consumer wants. For, even given declining population, businessmen are willing to assume that local markets have expanded; hence, their efforts are directed to capitalizing upon an unrealistically improved market situation. Local businessmen understand that population loss has occurred and that customer losses are noted in the transfer of purchasing activity to consolidated centers. But the picture is complicated by the advent of new goods and services that compete and replace traditional products and services; hence, older firms create an overlap in local business activity that depresses the effect of a diminishing population.

Adjustment to declining labor needs in agriculture. The decline in farm population has been proportionately greater than the decline in the total population of the county during the past 60 years. This discrepancy of movement between the two segments of the population appears directly related to marginal expansion of farming through improved agricultural technology, effecting in turn, a substantially reduced need for farm labor. Hence, in the absence of alternative employment opportunities sufficient to absorb the surplus farm population, migration has become a prime solution.

The absence of substantial change in the primary employment opportunities of the county, such as might be induced by small-scale manufacturing, mining, etc., has magnified the limited number of factors preventing greater out-migration. In short, limitations of agriculture are clearly related to already high out-migration of farm segments of the population. Nevertheless, agriculture has cushioned this trend through internal demands, which include: (a) An expanding agricultural technology has required more business, professional and mechanical services and more input capital in the form of machinery, fuel, soil and livestock-feed additives, etc.—thereby, creating its own secondary economic system. (b) Improvement in the transportation facilities has greatly increased nonresident travel in the county—stimulating an increased need for goods and services (e.g., gasoline, food and lodging). (c) The selectivity of out-migration has created a unique residual population—a population comprising a disproportionately high percentage of older, retired or semiretired persons. Among the older aged segments of the population, the costs of moving, social and financial, far outweigh the possible returns of migration. Moreover, among the aged segments of the population, migration means a lowered earning capacity, given national trends which favor employment of skilled young persons.

Changes in organization of business activity. The absence of growth in retail and service establishments in Farm County suggests an actual decline in size when size is measured by the number of personnel per firm. "Gradual deterioration and retirement" describes the pattern of business adjustment among older businessmen. As demand has selectively declined, paralleling population decline, many firms have adjusted by reducing trade lines and the numbers of employees and hired services. Labor requirements can, in many instances, be met by the pro-

prietor along with family members who, on irregular working schedules, conduct the traditional firm activities. In many instances, businessmen nearing retirement find that reduced labor is more in line with reduced physical energy and consumption needs of the proprietor. Under this condition, many older firms are undergoing a gradual dissipation of capital investment through failure to remodel or replace outworn and outmoded equipment and stock. Data further indicate that the proprietor role is frequently subordinated to other roles, particularly when the owner-manager is of advanced years. Many proprietors make decisions, not as businessmen interested in maximizing returns, but as family managers concerned with and constrained by the limitations of the family unit in maintaining business operations.

The avenues of business and economic adjustment appear as follows: gradual but persistent reduction in numbers of business units, with simultaneous minor specialization and moderate diversification in residual consolidated business establishments and minor alterations of internal organization that foster greater reliance upon operator or owner family labor. Inasmuch as these two trends are functionally related, they appear caused by an unwillingness among businessmen to completely and rationally abandon family-owned and operated businesses. The actual regression in unit size and the capacity for role specialization have not kept pace with national trends. Nonetheless, these trends permit a scaling-down of business activity which does not threaten total collapse of the economic system. Thus, it appears that the relatively rich agricultural base has been an accelerating factor in population decline but, at the same time, has contributed positively to the lag in organizational adjustment and business activity within the county. Yet this same agricultural capacity has postponed more serious economic decline.

GOVERNMENT SITUATION

Analysis of government systems under the impact of population change requires historical depth, since, in many ways, government changes at its own pace and under its own historically created rules. Also, government systems are somewhat removed from the direct effects of population when government is viewed as a bureaucratic organization designed to initiate and execute popular programs. Moreover, the links between local government and higher levels of government have grown closer, thereby altering the effect that a process such as population change may have upon government at all levels.

In considering population change and government, the purely local and autonomous character of government has been replaced by growing integration of local governmental units with state and national agencies and programs. Thus, the maintenance of various governmental levels does not depend wholly upon a stable population. Consequently, it is more difficult to demonstrate specific instances of how population change alters government structure or operation.

Further, change and problems in government operation are not easily linked to industrial development or agricultural richness. Generally, changes noted in county government systems have been introduced by agencies, such as state legislatures, outside the local level. But this should not be interpreted to mean that government systems are insensitive to population change or that they are not involved in the effects of population change; response, however, is slow.

Out-Low-Low Areas

Forest County, Minnesota

Background and history. The history of Forest County reveals many of the difficultues and problems of county government in the northland. After the loss of the lumber industry, the county's economy and tax support were severely curtailed. Land speculators, inducing settlement in "cut-over" lands, urged wide-open land-improvement programs. But the agricultural instability of the 1920's, farm and land abandonment, and the absence of industrial growth resulted in high tax delinquency. By 1930, the county had an indebtedness of over 2 million dollars, with an assessed valuation of only slightly over 1 million dollars. Approximately 90 percent of the county's land was tax delinquent during the 1930's. To alleviate tax delinquency, nearly 65 percent of the land was forfeited to the state, leaving the county with an even more reduced land-tax base. Thus, county government must be viewed in terms of high indebtedness, continued land forfeiture and conservatism urged by past experience.

County government organization and change. Since Minnesota county organization rests upon state legislation and constitution, little local option for change in county organization or administration exists. Nonetheless, organizational changes have linked county and state programs more closely. County departments have become small-scale versions of state government in such areas as welfare bureau activities, health programs, tax reapportionment work, school surveys, county extension programs and legal administration. The direction and leadership of county government is increasingly provided by the state, as the county assumes more and more the bureaucratic organization of the state.

County government and revenue. Traditionally, taxes have provided the financial support for county programs. Taxes are inadequate, however, and state aid is necessary to support the county's operations. Recreational use of lakeshore property has partially restored taxes lost from farm land, but recreational land use is not an adequate tax base for the county's needs.

Further, more tax money for goods and services leaves the county than stays in the county. In 1945, local vendors provided two-thirds of the goods and services required for county operation. By 1958, the figure was reduced to one-third. Population change has reduced the number of local persons supporting, as well as supplying, county operations.

Functions of county government. The functions assigned to the various county departments remain unaltered,

although state-county program coordination has expanded the role of county services while segmenting the offices of county administration. The various departments in county government assume a unity only through the county's financial operation; otherwise, the departments operate in a highly independent way.

Roles in county government. Certain new and more concrete rules have appeared in county government under the impetus of greater state-county involvement in joint programs. First, there are more specialists than earlier involved in welfare work, public health and nursing, education, engineering and legal work. On the local level, these posts are increasingly being filled by "outsiders" rather than by local people. Second, there are fewer part-time personnel in county government work. Instead, as departments have become more specialized, local persons have joined an enlarged county civil service staff as full-time personnel. Moreover, trends in employment suggest that the county is becoming an increasing source of full-time rather than part-time work. Last, the elected official's role has undergone marked change. As one official stated, "The days are past when I could take my work home and do it in an evening. I have several meetings a week with various groups on taxes and the school situation. So when they raised our salaries, we felt we had it coming." In short, elected officials are becoming professionals in government, participating in wider types of programs than ever before—from school surveys to tax equalization proceedings.

County government in action—the welfare bureau. Because of economic conditions, low living standards, few employment opportunities and the sheer volume of welfare need, the welfare bureau is one of the most active county departments. This situation has existed since 1930 when the relief program was geared to agricultural transition, the loss of early industry and the high unemployability of many residents. The relief needs of the county have changed little between 1934 and 1958. Although the population has decreased, the increased number of residual aged is revealed in the greater number of welfare beneficiaries. More than 70 percent of all welfare recipients receive old age assistance.

The major problems faced by the welfare bureau are interpreted as products of migration, especially segmental family migration. The loss of the household head through job-seeking or desertion frequently means that family support falls upon the welfare system. Aside from the housing, clothing and food needs of such families, delinquency also is noted. As one welfare director stated, "The problem facing so many families is the decision to stay and work at very low wages or to move elsewhere and take their chances." Further, indigence and family maladjustment compound the problems of family migration and welfare assistance.

Plains County, South Dakota

There is a general absence of overt change in Plains County government, although more subtle changes in administration and operation reveal the effects of population change. Nearly all change that has taken place involves county financing.

County government organization and change. County government, township and municipal administration have not changed in any gross sense. The duties and operation of local government continue as they have in the past. However, several new boards and commissions have been added to the traditional system of government.

County government and revenue. Plains County derives 95 percent of its revenues from property taxes. Given the extent of population loss, property valuation increased approximately 39 percent in the period 1950-59 as a means of compensating and bolstering taxes. Further, considering all sources of revenue, the county increased its income 23 percent between 1950 and 1959, largely through property and land reassesments. In spite of these revenue changes and population trends, no new services have been added. Rather, costs of government operation have increased, thereby reducing any gain from greater tax revenue. At the same time, more and more state aid has been given to the county service units, such as bridge and road commissions, county hospital services and minor service units. Nonetheless, the search for new revenue sources, as stopgap solutions to chronic financial problems, is a continual area of concern and frustration. County personnel and administrators suggest that they are "holding the line cost-wise," without curtailing customary services.

Incorporated village government. Despite continued population loss, the usual functions and administration of villages remain unaltered. Municipal revenue has been maintained through upward tax valuation. However, since many migrants are youth and nontaxpayers, the loss of residents is not reflected in the tax base. Further, many villages are able to hold their own because rural migration brings older, if not retired, persons—taxpaying replacements for the migrating youth.

Out-High-Low Area

Farm County, Iowa

Local government in Iowa is largely an extended form of state government. Major changes in the operation and structure of local government depend on legislative action rather than on local option or conditions. Change in county government has involved expansion and modification of older customary government functions.

County government organization and change. Farm County does not differ structually from other Iowa counties. However, Iowa Statutes permit minor variations: Farm County is one of 34 counties permitted hospital operation. Similarly, Farm County has an "integrated" welfare bureau, combinging the overseer of the poor with the welfare department. Since jurisdiction of local government is legislatively fixed, internal organization is the major area open for change. Consequently, when change has occurred, it has usually involved upward transfer of functions from smaller to larger units. The gradual eorsion of township functions is an example of an upward transfer

of duties from a smaller geographical units to the county under the principle of increased efficiency of operation.

The second form of change in county government involves an expansion of boundaries, with the aim of creating intercounty programs and commissions. The gradually diminishing rural population and the wider dispersion of county residents has fostered the intercounty approach to common social problems. Judicial and hospital districts and enlarged welfare units are examples of the intercounty scheme. The advantage of this approach is that it preserves the integrity of the county while expanding the geographical service base.

Impact of population change upon county government. No long-term cumulative effect of population change has been registered on county or local government or on the functions assigned to government in Farm County. The reorganization and expansion of geography units reflect certain general trends throughout government. But population change alone does not necessarily underlie these changes. Efforts to achieve greater efficiency and reduced cost of operation appear to direct the changes.

An emergent effect of population loss is the increased cost of government operation relative to the total population. Despite efforts to minimize costs of operation, there is an inverse relationship between per-capita costs and population until population exceeds 50,000. In view of the continually reduced county population, efforts to align county programs with the tax base may be premature. Thus, it is difficult to interpret the long-term effect of county reorganization and consolidation of services.

County government in action—the welfare bureau. As the population of Farm County becomes increasingly composed of older persons, the welfare needs of the aged are increasing at a faster rate than of any other segment of the population. The aged, for example, have particular health needs that cannot be met within existing county hospitals or rehabilitation services.

Since welfare programs are administered locally, the concentration of older, retired persons has placed new strains on welfare work. And welfare aid has become a supplementary source of income for many residents. In 1951, an average of 175 persons received social security benefits; more than 1,500 persons received similar benefits under revised welfare programs in 1960. In this respect, changing population characteristics and retirement are directly related to expanded government functions.

Problems of county government. County and local government officials cite one major problem. This is the apparent failure of the public to understand the problems of administering government on all levels. Most officials feel that a breakdown in public knowledge has occurred, which, in effect, has alienated the governing from the governed. Such a condition may be linked to the general disinterest in political and governmental action associated with mass society. From this disinterest, officials believe that secondary problems arise; i.e., tax problems, consolidation of services, recruiting of office-holders and public misunderstanding.

In-High-High Area

Suburban County, Ohio

The rapidity of population growth in Suburban County is unprecedented. Eleven suburbs had population increases in excess of 85 percent, while others increased as much as 350 percent, over the last decade. In addition to the half-million persons living in the metropolitan area, the rural-urban fringe contains an additional quarter-million. A 1950 census of government indicated 66 local governmental units, 18 school districts, 26 municipalities, 18 townships and four special districts within the county boundaries.

County goverment organization and change. The State of Ohio's constitution details the administration and broad organization of local government, including permissible variation. Change in county and local government has been limited and, as in the other counties, involves a gradual upward transfer of traditional functions from lower to higher levels. Certain levels of local government, such as the township, have become politically disengaged segments, mere residues of an older parochial form of government. Similarly, certain functions, such as welfare, have passed to supracounty coordinating agencies. The over-all effect is a gradual consolidation and upward integration of government functions, without associated loss of lesser traditional government structures. The keynote of change is centralization of authority and administration on all levels of government.

Typical of the change occurring under population change is that noted in the area of law enforcement. Maintaining law and order is merely one task of government, but population growth has magnified the problems of law enforcement and forced expansion of law-enforcement agencies. Law enforcement, formerly a township matter, is now handled by county law officers, aside from municipalities. This change is not without its consequences. Many older residents feel that they are not receiving adequate police coverage, despite increased costs and more full-time persons engaged in law enforcement. In the same vein, law enforcement, greater traffic flow and in-migration are related. In a single rural-urban municipality, one law officer not only provided his own salary through issuance of traffic tickets, but also provided nearly 65 percent of the municipality's revenue—an increase of 60 percent in 3 years.

Character of rural-urban government. Despite the cosmopolitanism of in-migrants, rural-urban fringe government develops its own parochial traces, a parochialism that is usually aimed at preserving the community's identity and social prestige. As one mayor stated, "I run the government in this village. I make all the decisions, appoint only the persons I want in office and make changes only when necessary. We have no debts and no Negroes, and, as long as I'm mayor, we won't have either."

Many villages have incorporated to avoid annexation and the dubious advantages of metropolitan attachment. The low voting rate in local elections reveals a general indifference to local government action. As one official

noted, "As long as taxes are low and streets repaired, the people say nothing. But when a tax issue comes up, then they turn out to vote."

Most office-holders have held posts for a number of years without serious competition. Younger residents do not participate in local government to the same extent as do older residents. Most in-migrants are unfamiliar with the problems of local government; national, state or county political affairs are of greater interest.

Problems of government and population growth. The problems created by rapid population build-up are so varied that they cannot be handled by any single level of government, nor are there effective cross-levels of government available to cope with the diverse problems. On the municipal level, the in-migrant has created problems in municipal services which tax older, and oftentimes inadequate, village facilities. Water, gas, sewage, fire and police protection, cemetery land, parks, social meeting places and zoning arrangements are the major areas of expansion and new demands brought by the in-migrant. However, tax bases are usually inadequate, and, despite the need for a tax revision, tax equalization proceedings have not brought the rural-urban fringe areas to a level equal to metropolitan areas. The lag in coordinating population growth, services and the tax base partly underlies the slowness in governmental action in meeting the problems created by in-migration.

Further, the administration of municipal governments, as well as of lingering township governments, consists of programs and policies that are often haphazard, if not replicative of programs conducted by higher governmental agencies. With the lack of stronger central planning and coordination, there is little systematic development of the rural-urban fringe. Planning appears after growth, when populations have already established residence patterns, when zoning has been informally done and when achievement lag has lost its former meaning to new problems.

The problem of inadequate revenue besets government administration at all levels. On the county and municipal levels, officials cite the lack of available tax monies as the reason for failing to keep abreast of needed services. Local governments have no deficits. But, if additional sources of revenue were provided, officials believe achievement lag could be removed. Nonetheless, greater tax monies would not assist some levels of government when such levels as the township are losing their sociopolitical significance. Last, rural-urban fringe parochialism besets government administration. The conservatism of the older resident, plus the reserved cosmopolitanism of the in-migrant, heightens the mutual separation of the two segments. The older resident retains the traditional "reins of local power," while the newcomer is indifferent to the affairs of local government. The result is alienation and disinterest in local political action. And the rural-urban fringe's approach to governmental problems has been to accept centralized government and loss of local decision-making.

SCHOOL SITUATION

Far-reaching changes in the organization of education, a great part of which stems from legislative action affecting the operation and organization of local school systems, are apparent over the past 60 years. Traditionally, the school has been viewed as a local community institution, receiving and educating the community's youth, tax supported and administered by local people. Over the last 50 years, the growing ties between local school systems and state and national agencies, through such matters as financial support, educational requirements, program direction and decision-making, have lessened the reality of a purely local autonomous school system. As a result, the school system is placed midway between two demand systems: (a) the demands, on the one hand, for broad implementation of educational objectives stemming from extra-community sources and (b) the demands of the local community to achieve educational objectives within its limited means and resources.

The recognition of demographic facts that affect the school system has prompted legislative action, because legislators are mindful, not only of local financial capacities, but also of the impact of declining populations. Legislation must recognize that population changes are related to changing conditions in the local community.

As the local community's school system becomes less autonomous and independent, extra-community agencies play a larger role in deciding the fate of school systems, particularly of declining schools. This is evidenced in the out-low-low and out-high-low areas, while the factors responsible for school change in the in-high-high area appear more directly related to recognition of increased school-age population and the need to expand school systems.

Out-Low-Low Areas

Forest County, Minnesota

History. Population loss throughout the 1940's and 1950's, together with mounting financial problems, fostered gradual consolidation of the school districts throughout Forest County. Under a favorable per-pupil rate assessment offered by the independent school systems, consolidation was a short-term process, induced largely by the decline in school-age population in open-country areas and the lack of financial resources of outlying school districts.

Enrollment. Despite fluctuations between 1945 and 1958, there has been a gradual decrease in secondary-school enrollments. However, sizable increases have occurred in the elementary grades. The drop-out of secondary-school students is a slow but persistent problem noted by school administrators. Student drop-outs usually come from families under some financial pressure and are associated with school dissatisfaction, low achievement and a search for employment. The desire of youth to migrate is evidenced by the relatively low percentage of graduating youth who remain in the county after complet-

ing high school. Less than 12 percent enter or seriously consider college, while others seek work or complete military service. Many girls migrate soon after graduation to take clerical work or secretarial or nurse's training in metropolitan areas

Student-teacher ratios. Teacher additions to the school systems have followed closely, but conservatively, the slight increases and fluctuations in enrollment. Selective addition of teachers with special subject skills has occurred as school reorganization made particular demands upon the consolidated school systems. In general, changes in teacher-pupil ratios between 1945 and 1958 are combined functions of decreases in the number of students and slight increases in the number of teachers.

Administration. School systems throughout the county could not be accused of administrative top-heaviness, since few school systems have a complete administrative staff. Several districts rely upon teachers as part-time administrators. Few of the junior high schools have full-time principals. Thus, teachers in the smaller secondary schools bear added burdens of administrative work along with their regular teaching loads.

Problems and implications. Most administrators agree that there is no local basis for encouraging the graduating senior to stay in the community—jobs are not available, and there is no evidence of any improvement in local opportunities. Consequently, the schools foster a cosmopolitan rather than a parochial view. All administrators and most teachers agree that their educational services are not primarily intended for the revitalization of the local community. Rather, nearly all perceive the purpose of the school to be that of a service institution which develops the potential of the youth, fosters additional education and provides basic skills.

Elementary school programs adhere closely to the recommendations and programs outlined by the State Board of Education. But specialized areas such as student health, courses in music, art, remedial reading and vocational guidance are deficient or entirely absent from the school program.

Despite extensive consolidation on the secondary-school level, high school and junior high school programs and curriculum vary widely. Only the secondary-school system in the county seat provides a range of subjects and special courses that exceeds the minimum curricula required by state regulations. Language studies, advanced mathematics courses, natural and social science programs are limited or entirely absent from the curriculum. The majority of high school graduates could not receive a broad college preparatory course; consequently, most students are trained in business practice and office procedure. As classroom needs expand, vocational arts and home economics programs are frequently dropped. Vocational arts courses are taught in only one school district.

Parent-teacher associations throughout the county have only nominal existence. Active parental participation in such programs is at best sporadic. Only elementary schools maintain regular parent-teacher activities, while junior high and high school systems lack regular P-TA programs.

Many problems of the school systems arise from the shifting tax-population base. Local tax support is inadequate. Consolidation was only a stopgap measure set against the long-term reduced tax-population base. In virtually every instance, school systems receive state and federal aid which exceeds local contributions by three to four times. Further, the problem of stretching the tax dollar handicaps the schools and affects their attractiveness to teachers and administrators. Certain school districts are forced to pay a slightly higher proportion of their tax dollar to attract and hold administrators. The high cost of transportation is directly related to the thinned, but dispersed, school-age population. The expense of transporting students over an area of 600 square miles is two or three times that of the state average, roughly $53 per student. No relief from existing financial conditions is foreseen. In three of the rural school districts, 70 percent of the total land in the district is not taxable because of previous forfeiture to the state.

Ultimately, the ability of the school system to hold and to recruit competent personnel is a function of financial conditions. Teachers' salaries are generally below those in the other parts of the state, but they parallel salaries in the rural northern area. Superintendents cite many instances of difficulty in recruiting teachers in languages, English and physical education.

Plains County, South Dakota

History. Although the history of the educational system in Plains County parallels that of Farm and Forest counties, there appears to be much greater resistance to reorganization and liquidation of inefficient rural school systems. Geographical and physical conditions in the county are intimately linked to the problem of school reorganization. Similarly, the fact that the county depends almost exclusively on its population tax base, without adequate federal or state aid for school support, accentuates the problem of school management.

Enrollment. Total enrollment in independent school districts and their attendance units has decreased, but preschool-age population in common school districts has been increasing slightly, reflecting increased birth rates after 1950. Total school-age populations have increased in independent elementary districts, but these also show decreases over the decade, resulting in fluctuations in total enrollment. (Elementary student attrition rates are less than those noted later in Farm County.) Village elementary-school enrollment has uniformly increased. Similarly, secondary enrollment in the county seat and two of the larger villages has increased, while selective decreases are noted in two of the smaller villages maintaining secondary schools. More significant, in terms of school-age population, has been the marked increase in the number of tuition students in elementary and secondary schools. The county seat and communities situated near the county's border have received many tuition students from adjacent counties, particularly from counties not maintaining secondary schools within reasonable traveling distance. Notable increases in the number of tuition students have,

in part, compensated for student population loss. It is conceivable that school reorganization, which incorporates nearby areas in adjacent counties, may even further increase the student-age population in the county seat and larger villages.

Student-teacher ratios. Student-teacher ratios are generally quite low, lower than those in Farm or Forest counties. In 1950, the ratio was 16 to 1 in the elementary grade schools. Student-teacher ratios are more favorable on the secondary level where, between 1950 and 1959, the ratios were approximately 14 to 1. The number of elementary schools between 1950 and 1959 dropped from 56 to 37, but the number of teachers decreased by only seven during that same period, from 72 to 65.

Administration. Turnover in teaching and administrative personnel is unusually high, although village teachers tend to remain at their teaching posts for longer periods than the rural independent school teachers. Salary schedules for rural school teachers are extremely low, with an average 1960 salary of under $3,000. Village teacher salary schedules are slightly higher than those of the rural areas but do not exceed $4,000. County teachers are nearly all well trained, and virtually all high school teachers have 4-year degrees. The low salary schedule of teachers in the county is seen by the superintendents as related to the excessive turnover rate among teachers, as well as to low teacher morale.

Problems and implications. A variety of problems confronts both the rural- and village-based school systems. Despite declines in the number of one-room schools, no compensating expansion of facilities has been made in consolidated school systems. Thus, as consolidation occurs, excessive use of village school plants results in an overburdening and continued deterioration of physical plants. Nearly all county schools are deficient in certain of the facilities recommended by state boards. Libraries, gymnasiums, laboratory equipment and extracurricular needs are generally inadequately met or met through only stopgap measures.

Changes that have occurred within the school system are only partly related to declining population; the more apparent changes in the school system result from efforts to continually reorganize and to make existing school systems more efficient. Community attitudes toward reorganization have become more favorable. Public interest in the school varies. Teacher-community relations are difficult to evaluate in usual terms since so many teachers are natives of the community. However, the problems of the schoolteacher are very similar to those encountered in Farm and Forest counties.

Out-High-Low Area

Farm County, Iowa

History. In 1950, Farm County had 28 school districts—8 districts maintained high schools, 11 districts operated only graded elementary schools, and the remaining school districts consisted only of boards of education, administering no district schools but retaining nominal existence. Twenty of the rural school districts, including those having "paper existence," had a total school-age population of 236 pupils. Accordingly, eventual school reorganization will result in the almost complete removal of these 20 rural school districts after redefinition of district boundaries.

In 1957, only one rural district operated attendance units, while seven similar rural school districts were integrated. Thus, the pattern of local reorganization and consolidation over the last decade has consisted of a selective reduction in the number of school districts, involving unification of attendance units without concomitant loss of former legal school districts and consolidation of independent village schools.

Enrollment. Since student enrollment affects the future need of dispersed versus consolidated schools, and as increased migration to villages and towns from farms occurs, the consolidated schools serve a greater percentage of county rural youth than before. Moreover, the extent of out-migration from the county over the last 2 decades is revealed in declining school-age populations, since a great part of out-migration involves whole families. School attendance in Farm County between 1950 and 1957 reveals that the entering first-grade class (age cohort) lost over 35 percent of its members between the first and eighth grade. Similarly, between 1951 and 1954, a fifth-grade class lost 26 percent of its members by the time the class reached the eighth grade. Similar losses are noted at the secondary level but are proportionately lower than those in the elementary grades. Losses in the elementary grades may be largely attributed to family out-migration.

Nevertheless, on the county-wide basis, elementary and secondary enrollments have tended to increase slightly each year. These gains—resulting from increased birthrates—are misleading unless interpreted in terms of subsequent student attrition rates. For when attrition is considered over a decade, a given age grade of students is barely holding its own in enrollment. Accordingly, the gains in enrollment noted during the first years of school are removed gradually over time.

Student-teacher ratios. The immediate effects of enrollment changes are revealed in student-teacher ratios. Despite attrition, the number of teaching staff increased slightly. (With little exception, personnel increases have barely kept ahead of enrollment figures in village schools.) In anticipation of eventual consolidation and school reorganization, certain schools—those most likely to serve as future county schools—began to increase their teaching staff. Accordingly, present improvements in student-teacher ratios have resulted from the additional staff, rather than from any sudden decrease in student population. But, it is debatable whether low student-teacher ratios will continue, given further out-migration, or whether future reorganization will raise existing low ratios.

Problems and implications. A wide number of problems are commonly shared by the county's schools. The lack of space and equipment and the absence of expansion plans because of uncertainty of the furutre are the most pressing problems. Also, teachers' salaries, personnel policies, teacher-administrator, administrator-school board and teacher-community relations are sources of many local

problems. Teacher turnover is unusually high in the declining rural school districts. This, in turn, is related to staff morale and recruitment problems. The "isolation of the teacher" from community life, lack of recreational and leisure-time activities in the rural community and the lack of means to attain professional objectives foster teacher-community resentment and result in high turnover rates.

The effects of population loss are revealed in the school's problems. First, the declining community loses its capabilities for mobilizing effective community effort. This is termed "lack of interest and support" by teachers. The loss of young families tends to remove that segment of the population whose interests are centered upon the school through their children. Second, this situation places the problems of school systems and school leadership upon older segments of the population whose notions and outlook upon the schools are very often traditional, conservative and parochial.

In-High-High Area

Suburban County, Ohio

History. Suburban County's rural-urban fringe area schools reveal a tremendous growth in the school-age population over the last decade. The rural-urban fringe schools are truly suburbanized, and rural characteristics are rapidly disappearing. New and expanding housing projects surround the older school facilities, while the modern school plant stands in marked contrast to the older style school buildings. In the early 1950's a wave of consolidation began that continues to the present, prompting school organization and annexation.

Administration. The administrative functions of the enlarged school districts are greatly expanded, and the management of the rural-urban fringe school poses different problems than those observed in the other areas. The continued realignment of school districts, attendance units and teaching and administrative staff, with the growing student populations, has meant greater expansion but less permanence of school services, programs and organization.

Aside from administrative personnel, teacher turnover is proportionately less than that of other counties studied. Improved salary schedules, better working conditions and the socio-cultural complex or rural-urban living lessen teacher turnover.

Student-teacher ratios. To meet the recognized influx of school-age population, sizable increases have been made in teaching staff in virtually every school system. Staff and personnel of the suburban schools are more specialized, have more diversity in subjects, curriculum and training than in school systems of the other type areas. Demands for new teachers have not been met through recruitment of older and, oftentimes, retired schoolteachers native to the suburban area. On the contrary, most teachers whether full- or part-time are recruited from the colleges and universities in central Ohio. Most teachers are outsiders to the local communities in which they teach, although many are familiar with the suburban or metropolitan area of the county.

Enrollment. The most conspicuous expressions of the impact of population gain are the new school facilities. During the last decade, nine of the county's rural-urban fringe school districts built new schools. All of the new schools are attractive and up-to-date and are equipped with modern auxiliary teaching aids and learning devices. Television and other audio-visual equipment are used in classroom teaching. Administrators clearly make the point that their policies emphasize a safe, clean, comfortable school and that this extends even to student transport. Fleets of new, brightly shining buses are the hallmark of the modern consolidated independent suburban school district. Residents on the whole are not reluctant to vote funds necessary for an improved physical plant, necessary materials and equipment. In general, the financial problems of the suburban schools are managed through bond issues, although school expansion programs far exceed present tax bases.

Problems and implications. Over the last decade, the influx of experts into the school, at both the teaching and administrative levels, is indicative of an important change in school developments. School administration has precipitated its own bureaucratic system, and schools on the whole resemble well-run, effecient units, geared to meeting, not only prime educational functions, but also a diverse range of demands engendered by changing American educational standards. Guidance work, administrative assistance to teachers, remedial programs, health and individual therapy, drama and music courses, school nursing programs, etc., are all included in the broad range of services and specialties offered by the suburban schools. All these services stand in gross contrast to the more meager and traditional programs provided by schools of the other type areas. The differences between the suburban schools and those of the other type areas are, in some instances, matters of degree. In other instances, the benefits and expanded programs of the suburban fringe school are truly differences in kind and orientation in the school systems.

CHURCH SITUATION

The institution of religion and the church systems in American community life depend upon subcommunities of believers—persons who choose to join or reaffiliate with a church, along with others whose commitment to a particular church or denomination stems from a family tradition. The religious system requires a relatively stable population, plus regular replacement of youth, if it is to survive and perform its institutional functions.

The size and characteristics of the congregation define the religio-social capacities of the local church body. When more youthful in character, the congregation undertakes programs and acts under demands different from those of a predominately older-aged congregation.

Population change may affect a local church system in two ways. First, population change may alter the social characteristics of the congregation and, thus, its capacity to act and survive. Without replacement, the continued loss of youthful members signals the decline in church

life and capacity. Second, population change alters congregation size, thereby affecting church strength and organization.

Further, since the church systems in community life, particularly among Protestant denominations, are manifestly voluntary associations, a lag in response to population change is frequently noted. This lag may involve failure to organize new resources, delay in absorbing new members or even failure to recognize membership loss. Thus, population change often creates problems and effects in church life unlike those found in the more secular systems.

Out-Low-Low Area

Forest County, Minnesota

Background characteristics. Eleven Protestant and two Catholic congregations, reporting a total membership of 1,102, or 28 percent of the county's population, were studied through interviews with pastors and church leaders.

Most of the county's churches are relatively old, established before 1900. Only five churches were established after 1925, and no new congregations have been added since 1950.

Distribution of the churches. Forest County churches are unevenly distributed, with greater concentration in the county seat and smaller villages adjacent to the county's recreation and resort areas. None of the open-country churches has a full-time pastor, with the exception of those congregations having definite "nonmission" status.

Size of churches. Congregations vary greatly in size, from 31 to 600 members, although none is large by urban standards. All churches claim an increase in membership, with marked increases in numbers of rural members. Rural growth rates have been more rapid than village membership increases. Further, small and middle-sized churches have increased by nearly 85 percent, while larger churches (more than 250) increased by only 21 percent during the same period. Most churches have sizable numbers of youthful members, although nearly all churches report proportionately fewer young married families.

Changes in organization and structure. The activities of Forest County churches are largely traditional, as defined by the customs and practices of each local congregation. Little organizational change has occurred, and such change cannot be linked to population change. Some change in activities from the past are noted in the release-time religion classes, interdenominational church groups, men's clubs, educational classes for adults and weekday religious services. For the county as a whole, 38 church programs were added between 1945 and 1958.

Relationship of church size to church programs. Congregation size is highly associated with the capacity of the church to develop programs, to finance church work and to attract and hold the pastoral leadership necessary to assure the continuity and expansion of the congregation. Despite growth or decline in membebership, some churches are clearly overprogrammed, while others are underprogrammed relative to their membership. Such assessments must be interpreted in the light of the sacred and secular traditions of the denomination. Nonetheless, the trends in church programs appear unrelated to population loss.

Church facilities. Nearly all the county's churches have adequate, permanent facilities, although many church buildings are old, lack modern equipment and need some renovation. Size and growth in church membership is associated with a more modern physical plant. Smaller "mission-status" congregations have old wooden church buildings, and social service programs are conducted in the homes of parishioners. Many of the county's churches have been engaged in building programs for two or more decades, with little success.

Church budgets. The average 1958 income for smaller churches was under $5,000. Middle-sized to large congregations had budgets ranging from $6,000 to $23,000. Large congregations have doubled their incomes through fund raising programs for building improvement or expansion, although this increase is partly offset by decreased buying power. Church financial support tends to mirror the reduced financial capacity of the county. In many instances, churches rely heavily upon tourists and summer vacationers for added church income—several pastors indicating that church expansion would not have been possible without the extra summer income.

Church leadership and roles. A striking change between 1945 and 1958 has been the increased number of full-time pastors in the county seat and villages. In 1945, county seat and village pastors more frequently than not held joint appointments in open-country or rural churches. The improvement has resulted from increased use of part-time or student assistant pastors among Protestant groups and visiting priests among Catholic parishes.

Certain changes also are noted in the characteristics of clergy serving the county—most are younger, better educated, stay a shorter period and are more social service and community oriented than their predecessors. The changes in the age characteristic of the clergy may be related to programs of in-service training conducted by church district boards. Problems in pastoral recruitment among Protestant denominations have been partly solved by having the young minister serve a "trial" parish shortly after seminary training or in the last 2 years of seminary work. Thus, the county is the first clerical location, rather than the second or third for most clergy.

Since the financial means of the county's churches are low, clergy are required to play many roles in church work. Pastors relate that they frequently act as church administrator, secretary, fund-raiser, statistician, reporter, historian, musicologist, youth director, family and marriage counselor, liturgist and psychologist. Although there appear to be greater demands placed upon the skills and services of the pastor, there is little opportunity for him to specialize in any one area without unbalancing his work.

The high degree of pastoral turnover is only partly related to the training program in the ministry. Turnover among older clergy may be related to low salaries, as well as to disenchantment and frustration.

Changes in numbers of persons involved in church work or in the programs of the churches are slight. Over the past decade, no specialized offices or personnel have been created or added. Thus, the county's churches are not wholly participating in the trends of American church life, aside from those aspects the pastor can develop.

Reaction of churches to out-migration. Several reactions to population loss are noted:

(1) Recognition of out-migration and preparing migrants: Among churches that annually lose a large number of youthful members, an adjustment is noted that involves inculcating religious and moral values in the potential migrant. Although there are no efforts made to discourage the migrant, particularly the youth from leaving the county, pastors indicate that they must, in the time available, instill the religious faith and achieve some assurance that the migrant will continue his religious affiliation in his destination community. This response is most characteristic of the larger churches.

(2) Indifference to population loss and its effects: Although out-migration may have removed a segment of the congregation and depletion continues, certain churches remain indifferent to these changes and their effects. These churches tend to view population change as one of the "facts of life" about which the church can do little. This reaction is noted in churches having the greatest parochial orientations.

(3) Capitalizing on population change: Certain churches, recognizing the slow change in membership, have capitalized on incoming summer residents and cabin vacationers. Such churches have accommodated their programs to these transient residents, thereby increasing church income, if not church strength. Second, younger pastors have urged church consolidation as a means of coping with population loss. Despite the possibility of improved church life and revitalization, through consolidation, however, merger is not seriously considered because of the strong sense of denominationalism among congregations.

(4) Preparation for termination: Among several smaller churches whose congregations have been traditionally small or recently reduced by out-migration, efforts are under way to consolidate the members with a denomination comparable in faith and practice to the terminating congregation. Although termination is imminent in only two instances, these cases suggest the inability of the smaller church to withstand the short-term membership loss.

Out-High-Low Area

Farm County, Iowa

Background characteristics. Farm County churches are old and widely distributed. Nearly all of Farm County's congregations are Protestant, with the Methodist Church accounting for over one-third of all church memberships and congregations. The county's 42 churches serve 4,338 families, with nearly one church for every 100 families. Thus, the county appears overchurched, inasmuch as a more favorable ratio of families to church units is roughly 200 families per unit. But, when the matter of overchurching is considered relative to religiosity, then overchurching can be minimized. In 97 percent of the households surveyed during a religious affiliation study, some preference was indicated for a specific denomination.

Church membership and size. Since the number of congregations created or dissolved provides a gross measure of social change, the absence of both new and dissolving congregations suggests a high degree of stability. This stability might not be observed if church participation and financial support were less. But the county's churches appear able to survive, if not to expand, despite apparent undermembership.

Membership figures over the past decade reveal general stability, rather than any sizable gains or losses. Family membership has increased, particularly in churches in the county seat. Rural churches show greatest losses in the youthful components of their congregations, as well as lower growth rates. Any increases in membership can be accounted for by slight gains in youthful members, along with greater numbers of elderly persons who have moved from the rural areas to the county seat or villages.

Changes in organization and structure. Church programs and organization are highly traditional, paralleling denominational pattern. Nonetheless, certain program changes in recent years reflect trends common to the larger American scene but of less pronounced form. Church programs have expanded along a variety of fronts (e.g., youth work, recreation, summer programs, adult education, etc.) reflecting more the youthfulness of pastors than any other factor.

Church facilities. Most churches in Farm County have permanent facilities, although the repair and expansion of buildings and equipment has lagged behind population change. In contrast, church buildings in the county seat reflect the greater resources at the disposal of the congregations. Two of the county seat churches completed building programs, while others added Sunday school rooms, youth and social centers, kitchen and eating facilities or residences for the pastors. In the county seat alone, close to a half million dollars was spent in church improvement and addition. In this respect, the agricultural capacity and richness of the county is reflected in church support and growth.

Church budgets. Annual incomes of the county's churches vary, but all give evidence of increased monies between 1950 and 1958. Building programs, rather than population gain, have prompted these increases. Losses in membership are not directly reflected in church income, except in the rural churches.

Church leadership and roles. The number of full-time clergy has not been affected by population change. However, pastoral turnover is relatively high, thereby altering the characteristics of clergy and the development of church life. As in Forest County, Minnesota, pastors in Farm County, Iowa, are younger, better educated and have greater turnover than their immediate predecessors. Pastoral turnover appears unrelated to population change—it is part of migration itself.

In other respects, church leadership suffers from lack of young members. The "gerontocracy" of the church becomes

more evident, especially in the rural areas. At the same time, the church has acquired more specialized roles, as reflected in the increased number of full-time paid personnel.

Reaction of churches to out-migration. Although certain reactions are noted in Farm County churches that parallel those in Forest County, the reaction to population change is not as clear cut. Those reactions noted are more of the order of problems than of social response in a dramatic sense.

For example, the continued high turnover of clergy leaves congregations apprehensive, particularly when the turnover involves young, mobile pastors. Younger pastors tend to blame the present difficulties and lack of development on their predecessors. In short, congregations are concerned about the continuity and stability of church life when their churches serve as "training centers."

On the other hand, 42 churches and the suggestion of overchurching presents future rather than current problems. While it is obviously a value judgment that the spectrum of denominations should be reduced, data reveal that, near the end of 1958, certain churches were faced with problems of recruitment and pastoral replacement—problems never before faced.

Further, with slowly diminishing membership and older members, problems of finances and church activities emerge. The capacity for church maintenance and spiritual life is not uniform among the county's rural and village churches. Rural churches are increasingly faced with the loss of members to village churches, but the process of termination is prolonged and costly.

In-High-High Area

Suburban County, Ohio

Background and characteristics. Protestant denominations predominate in the rural-urban fringe, with a marked absence of Catholic or Jewish congregations. The Methodist Church has the largest number of churches and the largest congregations.

The churches of the rural-urban fringe are relatively old, well-established organizations. Many were incorporated before 1850. Only three congregations were established after 1950. Although churches tend to be concentrated in the suburban villages, the remaining churches are quite widely distributed. Several open-country churches have moved to villages, but these continue to serve open-country residents.

Size of churches. Churches vary widely in membership, ranging from 30 to 1,400. Twenty-six percent of the churches had memberships of less than 100 persons in 1958 despite the population gain. Seventy percent of the churches had under 400 members. All churches report sizable increases in numbers of nonfarm members, along with greater numbers of young married couples. The average increase in membership per church amounts to 37 percent over the last decade, although greatest gains were noted in the Presbyterian, Lutheran and community Federated churches.

Lag in church affiliation and participation. Population gain in the rural-urban fringe exceeded 46 percent during the last decade, while church memberships increased by only 37 percent. The failure of these two rates to keep apace suggests that there is some lag on the part of in-migrants to affiliate with churches in the community. Instead, there is evidence that in-migrants retain their affiliation with churches in their last residence when possible and, thus, fail to migrate in a complete social and psychological sense.

Participation in church life has also increased with new members. But participation lags behind membership gains. This lag is explained by the highly complex, mobile and diversified conditions of community life which individuals tend to identify primarily with a single institution—rather than several—thereafter giving that institution greater time, effort and commitment. In the rural-urban fringe, there is evidence that church participation is sacrificed in varying degrees to greater involvement in family and neighborhood activities and to the demands of other work. However, village churches have less participation lag than open-country and rural churches.

Changes in organization and structure. Churches show little change in traditional religio-social patterns, despite in-migration. However, selective change is noted. The number of church subgroups has greatly expanded, providing broader organization and diversification to church life. Men's associations have grown faster than other subgroupings. Village churches have participated more fully in the growth of organizations and program change than their rural counterparts. Youth programs occupy a far greater place in church life in village than in rural churches, despite the fact that village churches have more youthful members than the rural churches.

Church facilities. More than any other aspect of church life, church facilities reflect the impact of in-migration, in the sense that congregations either have outgrown existing church space or have renovated and expanded physical plants. Nearly all churches have some building program under way. But, again, open-country and rural churches are less capable of attempting church expansion or building than the village churches. Hence, the growth in facilities is slower among these churches than among the village-based churches. Thus, of the 43 churches planning improvements, only 28 reported adequate funds or specific fund-raising plans. Much greater emphasis has been placed on providing facilities for youth than before, including facilities other than for traditional church uses.

Role of the church in social adjustment. Since the rural-urban fringe area is characterized by the mixture of two socio-cultural patterns, the amalgamation of peoples new and old might be assisted by the church. This, of course, depends in part upon church participation and the development of a vital bridging role of the church in community affairs. But there is only limited evidence that the church plays a significant role in the social adjustment of in-migrants. First, 17 percent of the new residents report that they do not attend or participate in church life. Of the church-attending 82 percent, about 54 percent attend less than half the time. Women, to a greater extent

than men, form the solid core of the church and are its promoters. Thus, the churches appear to play a highly variable and selective role in adjustment of in-migrants.

Conflict between new and old members. A further reason for the failure of the church to play a penetrating role in the social adjustment of migrants involves the differences between new and old segments of the congregation. New migrants differ in many respects from the older residents in established congregations. This is the modern clash of rural versus urban cultures. About one-third of the clergy cited some degree of conflict between the segments of the church in resolving church issues. Clergy frequently cite areas of disagreement as arising from perceived differences in the socio-economic classes of the congregation. Theological and doctrinal matters are of less concern than the social, political, economic and occupational differences that, differentiate the church's segments. One problem of the clergy involves minimizing distinctions that arise between unintegrated components of the rural-urban fringe parish. In this process, urban values and urban church trends largely prevail.

SUMMARY—POPULATION CHANGE AND ITS EFFECTS

MIGRATION, ITS ANTECEDENTS AND INDIVIDUAL RESPONSES

Notions of Migration

Migration involves a more or less permanent change in residence; a movement from a donor community to a receiving community. Moreover, migration in a social sense involves a transfer of loyalty, a change in identity and a disruption in social ties and commitments.

Migration also includes:

(1) a set of *antecedents* which stimulate or inhibit the individual's need or consideration of migration;

(2) a *decision-making process* during which the individual evaluates the need to migrate with reference to the opportunities and satisfactions available in a home community against the possible opportunities and rewards to be gained through migration—a process requiring that an individual formulate notions of personal aspirations, commitments to home community, a sense of social cost accruing from migration or remaining in the home community, and a feeling of social satisfaction with the present and future;

(3) *migration procedures* which are involved in the actual migration, such as identification, adjustment and re-establishment; and

(4) *social effects,* such as changes in population characteristics, altered institutional strength and problems of growth or decline, that are produced by migration.

Antecedents of Migration and Population Change

Unless involuntary, population change is rarely a sudden event. Although it may be rapidly precipitated, population change is a long-term process, based on the individual's evaluation of local conditions that prompt or suppress the need to migrate. The recognition of these "push-pull" factors sets the stage for migration.

Out-low-low areas. Community development in the out-low-low areas was largely based on an exploitive, rather than a guarded, use of human and natural resources. As communities lost their economic support through the depletion of natural resources, surplus populations were momentarily created. Present population loss, aside from the migration of youth, represents terminal departure of persons first attracted to these northern areas.

Over the last 50 years, the manpower needs of the areas have varied, depending upon the exchange between industry and northern farming as well as on periodic revivals in local northern industry. The out-low-low counties have been in a gradual period of decline, with only intermittent phases of recovery. The tourist industry and recreational land-use pose as major socio-economic solutions to past indebtedness, institutional lag, marginal agriculture and industrial underdevelopment.

Out-high-low area. Unlike the diminishable resources of the out-low-low areas, the out-high-low county is dependent upon land and agricultural organization—resources that, under continuous use, can only be monopolized or controlled in terms of access. Both technology and changing agricultural organization have altered farm production and agricultural manpower needs. The result is a surplus population. This surplus population consists of youth, along with persons financially unable to enter or stay in farming. Given trends that prompt further consolidation in farm organization, migration is an adjustment to the limited opportunity system. Migration encompasses not only the youth but also the retired farmers. Thus, the pattern of migration here is markedly different from that of the other two type areas. Further, as the aged and youthful dependent segments increase, the characteristics of the residual population are grossly altered.

In-high-high areas. In-migration is a complex factor, linked both to the dynamics of city growth and to the recent trend in decentralization of urban systems. Basically, in-migration in the rural-urban area is a reflection of the magnetism of all metropolitan areas, attracting and holding persons seeking socio-economic opportunities. The rural-urban fringe is the new frontier of the city. It is an explosively growing but unplanned result of urban sprawl that feeds on the dissatisfaction of urban dwellers and stifles the independent, rural-like existence of its former residents. Thus, the rural-urban fringe is a form of social transition—a temporary phase and solution in urban growth—that momentarily brings together two distinct social segments, the new and the old resident.

Individual Decision-Making in Migration

Role of the community. Each home community, along with its perceived opportunities or lack of opportunities, its past and presumed future growth, forms the guideline

for individual decision-making in migration. The home community, however, is only one reference point in the decision-making process—some other community, with its potentials, forms the second reference point. Between these two notions of community, the individual must evaluate his aspirations and commitments, the satisfaction he gains or might gain, the possible social cost of leaving or staying and the long- and short-term consequences of his decision. The role of the community as a potent reference system has been demonstrated in the case of the out-low-low and out-high-low type areas, where, particularly in the case of the migration of youth, the home community receives negative or low evaluation.

Strategy of individual decision-making. Regardless of the degree to which the individual's decision-making in migration becomes explicit, each decision in migration (or the decision not to migrate) is motivated by the aim of removing a sense of personal deprivation. That is, the individual looks elsewhere to pursue some goal or to meet some aspiration that he cannot secure in his home community. Thus, migration may involve a strategy that "optimizes a present, relative sense of satisfaction." This latter motive is noted in the case of in-migrants, whose past mobility is frequent and whose future mobility is taken for granted. In either case, the motivation for migration lies in the view that migration is an available and acceptable means to heighten the attainment of some goal. These strategies are illustrated in table 5.

Table 5. Individual responses to migration and community.

Individuals's sense of community satisfaction, social cost and need to migrate resulting in:	Evaluation of migration as an action strategy Migration intentions **Positive:** would not migrate	 **Negative:** would migrate
Low satisfaction with community High social cost of residence High felt need to migrate	Type A	Type B
High satisfaction with community Low social cost of residence Low felt need to migrate	Type C	Type D

Profiles of individual migratory and nonmigratory types. When the motives for migration are considered within the home community vs. "other" community frame of reference, it is possible to predict the outcome of migration-based decision-making as well as to identify types of individuals who fit in various categories. The decision-making outcomes and the types of individuals associated with these outcomes appear as follows:

Type A. (Would or have stayed—low community satisfaction)

1. Tend to reside in the open country, rather than in villages or rural farm locations.
2. Tend to have the lowest rate of mobility.
3. More frequently than not tend to claim their present community as their birthplace.
4. Tend to represent the oldest segment of the population, based on the age of male head.
5. Tend to have the least education (both males and females).
6. More frequently than not are employed in agriculture as the main occupation.
7. Tend, in terms of family variables, to have more children, fewer male children, more female children and a greater number of total migrant children than other types.
8. Tend to have the lowest level of living.

Type B. (Would or have migrated—low community satisfaction)

1. Tend to reside in villages or nonfarm residences.
2. Have the highest mobility.
3. Most often claim some community other than their present one as their birthplace.
4. Are the youngest of the four segments of the population.
5. Tend to have the highest level of male education.
6. Are represented in part by some professional occupations, rather than in agriculture.
7. Tend to have the highest or second highest level of income.
8. Tend to have the least number of children and hence, the least number of youthful migrants.
9. Tend to have the highest level of living.
10. Tend to have lowest level of social participation in the community.

Type C. (Would or have stayed—high community satisfaction)

1. Tend to have low mobility.
2. More frequently than not claim their present community as their birthplace.
3. Tend to have high, but not the highest, level of education of the four categories.
4. Tend to have the least number of professional occupations.
5. Tend to have some children, more frequently males than females and only some migrant children.
6. Tend to have the second lowest level of living of the four categories.

Type D. (Would or have migrated—high community satisfaction)

1. Tend to live in the open country or are newcomers to the rural-urban fringe.
2. Tend to have high, but not the highest, rate of mobility.
3. Have birthplaces in some area other than their present community.
4. Tend to have male household heads who are middle-aged, rather than particularly old or young.
5. Includes households in which the education of the male head or spouse tends to be average or low but not the lowest of all categories, while the education of the female head or spouse tends to the highest of the four categories.
6. Includes some persons engaged in agriculture but has the greatest number of persons of all four categories engaged in professional occupations.

7. Tend to have high, but not the highest, level of income.
8. Tend to have some, but not the greatest number of, children and to have some migrant children.
9. Tend to have the next to highest level of living.
10. Tend to have a high social participation score.

These classifications illustrate that, within each of the type areas, but regardless of the type area itself—whether in-high-high or out-low-low—there are categories of the population that display migratory-proneness as well as no desire to leave. The identification of these segments, relative to their likelihood of migration, provides some indication of the types of persons that will form the future residual population.

Migration Procedures and Forms

An individual's decision to migrate is followed by an immediate or slow severance of community ties, a change in identities, a loss of loyalty and a relocation. Each of these factors affects the home community, even as the destination community will be affected. Migration may be considered *temporary* with reference to the extent of continued contact with the home community, or migration may be *permanent.* The most frequently observed pattern in the out-low-low and out-high-low areas involves permanent migration. However, intermittent crosscurrents of returning migrants are noted during periods of economic growth. Most in-migration in the in-high-high areas is quasi-permanent, since the associated feature of upward mobility makes most in-migration transitional and temporary with reference to residence.

Relative to types of migrants, several classes are noted: *migration of youth,* involving persons 18-25 years of age; *middle-aged segmental family migration,* involving the relocation of only a segment of the family (husband or wife) whose adult members are between 26 and 65 years; *whole-family migration,* involving the relocation of the entire family or household unit; and *migration of the aged,* involving the relocation of whole or broken families (as through death, etc.) whose adult members are over 65 years of age.

Throughout the out-low-low and out-high-low areas, migration of youth accounts for over 60 percent of all migrants. However, the migration of the aged in and from these areas has added to the stream of migrants leaving rural farm areas to retire to villages or to depart from the region. Segmental family migration is noted in the out-low-low areas where the search for employment often involves a two-step process, with the husband or wage-earner moving first and the rest of the family following him. In-migrants throughout the in-high-high areas are largely whole families with young children. Since the bulk of migrants are youthful or early to middle-stage families, areas losing population have had sizable increases in the numbers of the two dependent age groups, the very young and the aged. Loss of invigorative segments is reflected in institutional decline and changing social patterns.

Transfer of Community Identity

Migration involves a psycho-social adjustment of the migrant to new surroundings, even as a residual population is forced to adjust to population loss. For the migrant, reintegration and community identification underlie adjustment. However, nonmigrants, "old" or residual populations, are faced with problems created by the influx of newcomers as well as by the loss of persons whose contributions and role in community life were previously taken for granted.

For the migrant, adjustment to the receiving community, as in the in-high-high areas, is linked to the reasons for migration and to social acceptance or rejection and access to institutional life. The integration of the newcomer and the "older, established" population, keynotes the problems in the in-high-high areas. Attitudes of suspicion, cynicism or heightened traditionalism may appear in response to newcomers. Similarly, among residual populations in the out-low-low and out-high-low areas, indifference, mere vocal concern or segmental community action may follow in the wake of continued population loss. In these latter areas, the rate of out-migration has been so slow, although prolonged, that population loss and its effects often go unrecognized or are taken for granted.

IMPACT AND EFFECTS OF POPULATION CHANGE ON SOCIAL AND INSTITUTIONAL SYSTEMS

Effects of Population Change

Gradual or long-term population change induces a variety of community, institutional and individual responses. These responses, in turn, affect the stability, growth or decline of social life. Three major types of population effects can be seen in the over-all impact of population change.

Cumulative effects. Cumulative effects of population change refer to the consequences that broadly affect the entire community or institution, rapidly or slowly inducing wholesale reorganization and adjustment. The critical clue to the cumulative effect lies in observable changes in the social boundaries of institutions or the maintenance of functions. In the out-low-low areas, for example: As the number of school-age children living in outlying districts decreased over time as a result of family migration, the number of attendance units decreased correspondingly. School consolidation was a means to achieve financial stability, maximum use of staff and resources and a way to reduce tax burdens of economically impotent school districts. After consolidation, young families returning to the county tended to settle in villages having a consolidated school or in the county seat rather than in the open-country nonfarm area.

Cumulative effects of population change tend to signal decline, or are associated with loss of function and centralization. Throughout the out-low-low and out-high-low areas, changes in trade areas, school reorganization,

centralization and integration of government systems, church decline and growth of the county seat to the virtual exclusion of other areas—all signal gross cumulative effects of population change.

Differential effects. Differential effects of population change refer to the selective, frequently isolated or fragmentary effects of population change upon institutional life. The differential effect is noted in the discontinuous (periodic) and highly particular changes in institutions, which do not disturb the area's institutional organization or social patterns. In the out-low-low areas, for example: During the period of variable in- and out-migration, the effects of migration upon the economic system were selective and discontinuous. Primarily, the small, nondiversified, limited-service enterprises were affected by the intermittent loss of a service population. Many of these commercial units, in some instances, increased their operations, expanded or further diversified. As tourism increased, certain businesses were created which catered almost exclusively to vacationers and cabin-owners.

Although cumulative effects of population change have induced the most penetrating changes, there is a greater range and diversity to differential effects. Changes in the characteristics of the population, selective economic decline or growth, changes in government programs and organization, individual response to in- or out-migration and diversification in social systems outline the major differential effects noted in the three type areas.

Emergent effects. Emergent effects of population change refer to those kinds of changes only beginning to affect the patterns of institutional life; the full consequences of these changes cannot be isolated and determined. Since it is not always possible to determine the full course of a trend initiated by population change, the notion of an emergent effect attempts to describe those consequences that are merely above the threshold of social recognition. Again, in the out-low-low areas, for example: The introduction of the tourist industry and increased recreational land use may halt or selectively inhibit the migration process as local personnel seek to capitalize on this new source of income. Simultaneously, various subsystems may be differentially reoriented to accomodate the cabin-owner, tourist and vacationer. Without the tourism and greater recreational land use, population loss might continue at a higher rate.

A wide variety of emergent effects are noted—trends directly related to population loss or gain. For example, tourism, institutional overdevelopment (e.g. "overchurching"), lag in school reorganization, economic recovery programs, agricultural adjustment and the increasing numbers of aged are all factors related to population loss. However, the full impact of these factors cannot be clearly stipulated for the out-low-low and out-high-low areas. Similarly, the emergent effects of "achievement lag," rural-urban fringe planning or its lack, transportation problems, urban decentralization and rate of metropolitan economic growth cannot be predicted in the in-high-high areas. Nonetheless, these emergent factors are the forerunners of future social trends which, in turn, will affect population and social stability.

Response to Population Change

Economic systems in out-low-low areas. Migration from the out-low-low counties, especially migration of youth, stems from the lack of social opportunity and from long-term socio-economic depression. The northern counties have made only a very gradual recovery following the removal of their natural resources. The length of this partial recovery mirrors the intermittent phases of prolonged economic decline. In Plains County, South Dakota, the reorganization of agriculture has modified the basic economy of the county, thereby hastening further population loss.

In the northern out-low-low counties, economic adjustment and scaling-down of commercial activity occurred during the 1920's. Current revision and fluctuations in commerce and business stem from local trade and service demands, particularly the tourist industry. The counties as a whole have not participated in national business trends. Dollar volumes have fluctuated or declined more in the out-low-low counties than in the other type areas—a condition that appears related to the reduced income and service demands of the residual population.

Business patterns reveal the process of "gradual retirement" among local businessmen and firms, without replacement. Thus, decline is generally evident. This pattern of retirement is also linked to local market conditions, demands and business pace, rather than to state or national trends.

The agricultural segment of the out-low-low counties, with the exception of Plains County, is marginal and chronically unable to contribute to the enlargement of the county's economy. The inability of agriculture to provide an adequate livelihood is further related to out-migration.

Economic systems in out-high-low area. Over the last 60 years, increased technical efficiency has reduced agricultural manpower needs. But such technological progress has not, in turn, created a sizable demand for new products or services to absorb persons displaced by technology. Since the alternative employment opportunities in the nondiversified economy of Farm County are rather limited, out-migration between 1950 and 1960 has been high, reaching 17.8 percent.

The adjustment in economic organization to continued out-migration involves reduction in the number of business units, along with change in the operation of remaining units. It is evident that Farm County has not kept abreast of national trends in commercial consolidation, services and demands, although the changing character of the consumer population may affect this lag.

Gradual retirement also is characteristic of business operations in Farm County. This pattern is associated with decreasing role specialization and greater subordination of work roles to nonoccupational roles.

Out-migration has greatly skewed the residual popu-

lation toward the aged. This, in turn, has created a highly specialized set of consumer demands, unlike those of a more diversified population. This factor has further restricted dollar volumes. However, the larger villages and county seat are partly exempt from the population change effects noted elsewhere in the county.

Despite the lack of industry, the agricultural segment of the county's economy has cushioned the more debilitating effects of population change. Nonetheless, agricultural technology underlies the problem of population change.

Government systems. The effects of population change upon government systems are obscured in many instances by the variety of other social and political forces that create change. Thus, the social response of government systems to population change is mixed with responses to other demands and problems, regardless of the level of government.

Nearly all levels of local government have lost a measure of autonomy, a situation associated with the loss of importance and vigor of lower levels of government. Population loss and the rapid turnover of residents is clearly related to this condition. Further, there is a growing alienation of the governed from the operation of government, along with an indifference to the administration of local government. Government officials cite indifference as one of the major problems of government, and it may well be related to increased mobility and anticipated migration which prevents residents from participating in political action.

As migration of youth continues, the operation of government is led by the aged, creating a political "gerontocracy" by default. A limited counterbalancing role is played by the specialist or career worker in government service—but not a role that offsets local political power structures.

In all counties surveyed, there is a growing economic role assigned to government—a role that, in some instances, is related to population change. Expanded welfare programs and health services are examples. Moreover, government spends more money, having expanded but not changed its functions, thereby creating employment. Such employment opportunities are a new source of income for many residents, especially for women. In some areas, government spending is a sizable part of the total economy, and both government aid and state support are tied to the fate and future of a flagging local economy.

Because legislative action has not directed any change, county government has not altered structurally in any of the type areas surveyed, although local operations have been modified to meet needs. Lower levels of government, such as the township and village, have lost traditional functions through the consolidation and centralization of services and funds. In other instances, lower levels of government have lost their identities and functions through abandonment of these functions to have them replaced with superimposed state and national programs. Thus, county administration has lost certain older functions and programs while becoming more and more tied to state and national programs. A county government is less able to support a wide range of programs because of limited tax bases, and there is a growing dependence on higher levels of government for needed aid. Population trends underlie this condition.

The operation of county government in the out-low-low areas has been seriously affected by persistent population loss. The removal of a stable tax base has meant continued indebtedness and land forfeiture. Without means of alleviating the tax problems, the counties become increasingly dependent upon extra-county revenue sources. Further, more revenue leaves the county, by way of costs for governmental goods and services, than remains within it. In both the out-low-low and out-high-low areas, the welfare departments are most directly affected by population change, while other agencies are only indirectly affected.

In the rural-urban fringe, government operation at all levels reveals change in response to in-migration. However, despite the reorganization and centralization of services and administration, achievement lag is noted. The growing numbers of in-migrants accentuate the problem of political alienation and indifference to governmental programs, except when the in-migrant is directly affected. The contrast between new and old residents in the rural-urban fringe becomes evident in the desires of the two segments for different types of governmental services. The lack of coordination among levels of government, the delay in social response and the rate of growth foster innumerable problems—problems common to the other type areas but differing only in magnitude.

School systems. Social institutions, such as the school systems, which are more and more dependent on extra-community sources for leadership, personnel and financial aid, are less able to control their own futures. Further, such institutions react to population change, even if slowly. The source of pressure on the school systems is not necessarily the local community but extra-community agencies directing the fate of the local school system. This observation is confirmed in the out-low-low and out-high-low counties but not in the in-high-high area where local response has prompted school growth and adjustment to keep pace with in-migration.

The reaction to population change by school systems is generally cumulative: As the school age population declines, a gradual reorganization of the school system results. This reorganization usually involves adjustment in boundaries to keep the ratios of service area to population high. At the same time, school consolidation continues.

The school systems of the out-low-low and out-high-low counties have been consolidating and reorganizing for more than 2 decades; at no time has a stable reorganization point been reached. These reorganization programs have aimed at reducing costs of education. However, the increased transportation costs partly offset any savings as long as the school-age population decreases in the rural areas. In these two type areas, major school

changes were first prompted by legislative action and not by local action. Moreover, in school systems rapidly losing their service base, a higher degree of staff turnover is noted, along with low morale, low community interest, little school facility expansion and a minimum of future school planning.

In contrast to the other type areas, the school systems of the in-high-high area have been greatly stimulated by population increase. First, school consolidation and reorganization occurred early. Thereafter, the rural-urban fringe participated in national educational trends, akin to those of the metropolitan area. School systems have been upgraded, facilities have been expanded, curricula have been revised and updated, and teacher and staff turnover is less than in the other two areas. The single major problem in the school systems is the problem of accommodating incoming students and mobilizing community financial support for school growth.

Church systems. The impact of population change upon the church systems in the three type areas is varied. No single type of reaction is peculiar to any one area. Many churches appear unaffected by population loss in a county; others, usually smaller churches, are forced to disband when membership declines.

However, population change has dramatically altered the age composition of church membership. In the out-low-low areas, congregations are becoming older, and similar changes are noted in the out-high-low area. But in the in-high-high area, congregations are becoming more youthful. The ability of a church to withstand and benefit from population change appears related to the critical factor of youthfulness in the congregation. The traditions of church life, organization and programs are preserved in the out-low-low counties. Parochialism and denominationalism predominate in both the out-migration counties.

The hypothesis that the agricultural system cushions or postpones institutional decline is confirmed in the out-high-low county. Despite the fact that the county is "overchurched," the high financial support the churches receive is a partial indication of the support that agriculture provides.

The problems and reactions of the rural-urban fringe churches are more varied. Nearly all churches have capitalized on membership increases, although there is some lag noted in mobilizing the resources of the congregation. Some churches have definite splits between the new and old residents, with the new residents urging greater participation in national church trends rather than conservative, traditional church life.

During the survey period, no new congregations were established in any of the type areas. This suggests that, in the out-low-low and out-high-low areas, the church systems are adequate for needs of the residents. In the in-high-high area, this fact suggests that the greater part of the in-migrants are absorbed into existing churches, even with reaffiliation lag.

IMPLICATIONS OF POPULATION CHANGE

Regional Problem or a Sign of an Emerging National Community?

The implications of population change cannot be limited to particular trends and social consequences within the North Central Region. A proper perspective for understanding the role and implications of population change in the 1960's involves national as well as purely regional factors. Some of the more important factors involved in regional and national population trends include:

1. As members of a free and democratic society, Americans enjoy individual freedom of movement, and, as long as this freedom to move at will is unrestricted, individuals will migrate for purely personal reasons or under the pull of socio-economic factors in pursuit of the elusive "American Dream" or the "Good Life."

2. During the nation's earlier periods, internal redistribution of population served to mobilize unused resources, both natural and human, while fostering the growth of communities. Migration before and immediately after 1900 provided the groundwork for the later expansion of the socio-economic base, in both agriculture and industry. Subsequent migration has been prompted by factors other than primary resource development and has resulted in far different effects than those noted earlier. Foremost among these has been community decline in the wake of out-migration and new community growth and expansion around older urban centers in response to in-migration.

3. Current migration is basically a social response to the opening and closing of socio-economic resources and opportunities. The collective effort seen in earlier migration, which resulted in regional growth from 1870 to 1920, is not evident in present population trends. Rather, migration is now an adjustment process, moving persons from areas of declining socio-economic position to areas of growing opportunity. Without the compensation of out-migration, a surplus population is created in areas having low or gradually closing opportunity systems. At the same time, such areas are stigmatized and have unusual demands placed upon communities, institutions and resource use. This is noted in the out-low-low and out-high-low counties. On the other hand, a segment of the region's population has become increasingly mobile and more alert to areas where employment and related opportunities arise. Thus, the future surplus population is more and more made up of older, residual persons, while the younger segments become less rooted, more migratory and more conscious of the social aspects of mobility.

4. A wider segment of American society is now dominated by the "success" theme of mass culture. The success theme provides a new motive for migration in an environment of limited opportunities. For when individuals, particularly the youth, sense that their home communities cannot provide the skills needed to succeed under present standards of American life, then migration

is an acceptable first step to gaining success elsewhere.

5. The geographic and historic significance of urban areas is secondary to their importance as centers of modern industry, technology and cultural opportunity. The urban area, regardless of its location, is synonomous with access to opportunity.

6. The development and expansion of socio-economic opportunities, along with the growing concentration of human and technical resources in urban areas, are largely *planned and directed processes,* such as industrial growth, suburban development and resource use. But, in contrast, individual migration is *unplanned with reference to its effects upon the sending and receiving communities.* Consequently, migration selectively perpetuates beneficial as well as detrimental effects.

Short- and Long-Term Consequences of Regional Population Change

Short-term effects. The immediate and most pronounced effects of population shifts have been the changes in population characteristics. These changes have altered the vitality, rate of growth or decline and demands placed upon social institutions. Out-migration of youth, stemming from the 1930's through the 1960's, has removed the invigorative, better-educated persons from the farm to the town and from the town to the metropolitan area. In turn, the loss of these persons induces changes in economic life, housing, schools and family growth. The residual populations in out-migration areas have more aged and young dependent members. The adjustments in the agricultural segment of the population have slowly induced changes in the traditional occupational structure. Data suggest that these trends will continue through the 1960's.

Institutional responses to these short-range effects of population change depend largely upon the character of the residual population, its support and levels of past performance. In most instances, population change has been a slow but prolonged process, except in the in-high-high areas. Effects of population change in the out-low-low and out-high-low areas have been all but unrecognized, and little social consequence has been attached to them. However, the rapid build-up of population in the rural-urban fringe has produced widespread institutional growth. The short-term effect is more pronounced and significant than possible long-term consequences that cannot yet be predicted.

Long-term effects. The long-term effects of population change have implications primarily for institutions and communities. In areas of out-migration, the long-term effects of population change have consistently involved consolidation of service units and centralization of administration, as noted in school, governmental business and religious systems. When population loss reduces school-age populations, consumers, taxpayers or parishioners, the various institutions respond by reorganizing, curtailing service, consolidating trade areas, cuttng back goods and services offered, integrating with higher levels and, eventually, discontinuing operations. These trends are noted in differing degrees throughout the out-migration areas. Where agriculture or industry offers some compensation, the rate of decline is slowed or even postponed. As a result, the community gradually loses control of its future and its ability to support its institutions.

The continued loss of youth and the growing numbers of aged pose special problems for the out-migration areas. A middle-income family spends a substantial amount, nearly $10,000 to $15,000, to raise and educate a child, and a community invests a near equivalent. The loss of this productive member means a community loss of income and support. Although the individual may earn more elsewhere, there is no replacement. The aged, in contrast, are past their productive years and, like the youth, contribute less than productive members. Thus, the loss of youth, coupled with the increase in aged, places greater financial burdens upon the productive segment of the community. Loss of potential leadership, loss of continuity between generations and the dismembering of community are still further implications of population loss.

APPENDIX: DATA SOURCES AND RESEARCH PROCEDURES

Information included in this report represents the highlights of various state reports, which, in turn, were based on a variety of field studies undertaken by contributing north-central states to project NC-18. Field studies, census reports and related materials from social institutions and communities within the selected counties—as representatives of type areas—were the prime data sources. Field studies centered upon two major problems: (1) individual and family adjustment to population change and (2) institutional response to the effects of population change. All field studies conducted by participating states used questionnaires and interview schedules developed by the Procedures Committee of NC-18, with some adaptation for local use. Census materials were used to obtain specific background information on population characteristics and trends in the survey counties. Additional data secured from community and institutional sources were used to complement field data, thereby expanding the picture of social change and population impact.

The research program encompassed by this report consisted of four phases conducted both on a cooperative regional level and on state levels: (1) the determination of type areas and the classification of counties in the states; (2) the preparation of field materials, questionnaires, schedules and research procedures; (3) individual state field work conducted within a survey county, as outlined by the NC-18 Procedures Committee, including additional survey work on special problems within the selected county; (4) data analysis and publication of state reports constituted the remaining phase of activity.

The data that have been collated in this report were drawn from separate reports from each of the participating states: Iowa, Minnesota, Michigan, Ohio, South Dakota and Wisconsin. A resumé of the research programs of the various participating states follows.

Iowa: Iowa State University. Basic data were secured through a random, stratified, 8-percent sample of Farm County's rural farm, nonfarm and village households for determining characteristics, past mobility and adjustment of the residual population (N=354). Additional information surveys covering a decade were conducted upon Farm County's economic, educational, governmental and church systems. More intensive comparative analyses were made to determine differences in adjustment patterns between rural and village residents, and a special analysis was made of a selected sample of former county residents who had returned to the county.

Michigan: Michigan State University. Following participant-observation, two of Copper County's townships were selected for the household survey since these townships best preserved the typical rural-nonfarm and rural-farm distinctions, along with age and sex distributions. From these two townships, five areas were selected from which a random sample of one-fourth of the farm and village households was selected (N=168). No data on institutional adjustment were collected as part of the Michigan program.

Minnesota: University of Minnesota. Following an initial pilot survey of Forest County, an area-probability sample was developed from the county's townships and sections, reducible to farm, open-country and village households (N=260). These data, along with data gathered from families having children of high school age, were used in studies of individual traits, adjustment to out-migration, social cost and migration proneness. Institutional surveys were made of school, church, governmental and economic systems, and interviews were conducted with key institutional leaders and personnel. The school teachers and businessmen of the county were studied under special problem areas.

Ohio: Ohio State University. The Ohio study involved two phases: first, the study of a random sample of rural-urban fringe family household units, including both old and new residents (N=234); second, data collection and analysis of materials on the educational, religious and governmental systems, with emphasis on detection of new institutional trends between 1950 and 1957 related to in-migration. Interviews with officials and available records provided data for institutional analysis.

South Dakota: South Dakota State College. Data for the study of the characteristics, satisfaction adjustment and migration proneness of the residual population were secured through a random sample of farm and nonfarm households drawn from the farm and village directories (N=226). Additional data on the economic, governmental, school and church systems were collected through interviews and records. A special study was made of business trends and commerce over a decade with reference to agricultural adjustment and out-migration.

Wisconsin: University of Wisconsin. Wisconsin's participation in the regional program involved two type-area counties, an out-low-low and an in-high-high county. Data for the study of the out-low-low county were limited largely to population analysis, centering around a sample of 453 open-country households classified on the basis of major occupational activities of the heads. No specific data were secured on institutions of the out-low-low county. The second phase of Wisconsin's research centered more intensively upon the in-high-high county. This research was preceded by various pilot studies, observations and informal interviewing. Major data were collected through structured interviews in six selected rural-urban nuclear and peripheral settlements (N=312). Data thus collected heavily emphasized past mobility, trade area notions, use and evaluation of local institutions and social satisfaction. Additional institutional data were secured through interviews with key personnel and officials of the educational, governmental, welfare, recreation and religious systems.